U.S. ARMY CORPS OF ENGINEERS
CIVIL WORKS PROGRAM

CONGRESSIONAL SUBMISSION
FISCAL YEAR 2004

SOUTHWESTERN DIVISION

Budgetary information will not be released outside the Department of the Army until 3 February 2003

Justification of Estimate for Civil Functions Activities
Department of the Army, Corps of Engineers
Fiscal Year 2004

SOUTHWESTERN DIVISION

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SUMMARY, SOUTHWESTERN DIVISION

	FY 2003 Allocation	FY 2004 Request	Increase or Decrease
General Investigations			
Surveys	TBD	$ 6,361,000	TBD
Preconstruction Engineering and Design	TBD	1,539,000	TBD
Subtotal General Investigations	TBD	(7,900,000)	TBD
Construction, General			
Construction	TBD	70,600,000	TBD
Major Rehabilitation	TBD	0	TBD
Dam Safety Assurance	TBD	9,400,000	TBD
Subtotal Construction, General	TBD	(80,000,000)	TBD
Operation and Maintenance			
Project Operation	TBD	131,889,000	TBD
Project Maintenance	TBD	146,035,000	TBD
Subtotal Operation and Maintenance	TBD	(277,924,000)	TBD
GRAND TOTAL, SOUTHWESTERN DIVISION	TBD	$ 365,824,000	TBD

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

1. SURVEYS - NEW

a. Navigation Studies: None.

b. Flood Damage Prevention Studies: None.

c. Shoreline Protection Studies: None.

d. Special Studies: The amount of $231,000 is requested in Fiscal Year 2004 for completion of one study.

Oklahoma

Miami and Vicinity	1,070,000	520,000	To Be Determined	231,000	To Be Determined

The City of Miami, Oklahoma is located in Ottawa County in the Grand (Neosho) River Basin. Ottawa county is in the northeast corner of Oklahoma and borders Kansas and Missouri. The Grand (Neosho) River and Tar Creek, an uncontrolled tributary, causes frequent flood damages to the communities of Commerce, Picher, and Miami, Oklahoma. Recent major flooding occurred in October 1986, March 1990, June 1990, July 1992, December 1992, May 1993, September 1993, April and May 1994, and June 1995. A reconnaissance report for Miami, Oklahoma, and Vicinity, completed in 1989, identified a Federal interest in flood damage prevention measures for Miami and other areas of Ottawa County. However, a cost-sharing sponsor for feasibility studies could not be identified and the study was placed in inactive status. In addition to flooding, the communities also have problems resulting from mining activities, which peaked during the years 1907 through 1946. The last mining company closed down in 1970. The abandoned mines flooded and in 1979 metals-laden water began discharging to surface streams in the Tar Creek watershed. Heavy metals, including lead and other pollutants, contaminate floodwaters and have created significant losses in terrestrial and aquatic habitat, and are the cause of an ongoing human health risk. A 40 square mile site was added to the first National Priorities List (NPL) when Congress created the Superfund program in 1983, and the Environmental Protection Agency (EPA) remediation efforts soon followed. The State of Oklahoma formed the Tar Creek Superfund Task Force in January 2000 to bring all Federal Agencies involved in the Basin together to develop a comprehensive plan to address all water resources issues in the Basin. To provide the State of Oklahoma with an optional process to consider, the State requested the Corps of Engineers identify a strategy that would lead to the identification and implementation of a comprehensive plan for the study area.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

Oklahoma (continued)

Miami and Vicinity (continued)

The reconnaissance study will evaluate water resource problems in the Miami, Oklahoma and Ottawa County vicinity and identify the Federal interest in potential solutions, including ecosystem restoration measures. It will include development of a Watershed Management Plan that will identify a comprehensive combination of recommended actions to reduce flooding and restore the watershed ecosystem to an acceptable condition. The study will be coordinated closely with on-going and planned EPA initiatives, and incorporate a team of multi-Federal, Tribal, State, local community, and other stakeholders. Study alternatives could include structural and non-structural flood damage reduction measures, creation of riverine corridors for habitat and flood storage, development of native grasslands and wetlands to improve ecosystem habitat and other measures to enhance the quality and availability of habitat and reduce flood damages. The proposed study is supported by the State of Oklahoma, which would act as the local sponsor for the feasibility phase of the study.

Fiscal Year 2003 funds are being used to continue the reconnaissance phase of the study to formulate a preliminary Watershed Management Plan for the Tar Creek and Spring River watersheds. Funds requested for Fiscal Year 2004 will be used to complete the reconnaissance phase of the study. The completion date for the reconnaissance phase of the study is to be determined.

e. Comprehensive Studies: None.

TOTAL SURVEYS - NEW	1,070,000	520,000	To Be Determined	231,000	To Be Determined

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

2. SURVEYS - CONTINUING

a. Navigation Studies: The amount of $2,170,000 is requested in Fiscal Year 2004 for continuation of five studies.

Arkansas

Arkansas River Navigation Study	5,830,000	3,538,000	To Be Determined	1,070,000	To Be Determined

The study area consists of the entire McClellan-Kerr Arkansas River Navigation System in Arkansas and Oklahoma. During the reconnaissance phase studies, representatives from the towing industry expressed concerns regarding the impacts of high flood flows on the system. Users (barge tow operators) have been experiencing delays in navigation due to low water conditions at the lower end of the system, and high flows resulting from flood conditions on the upper end of the system. Montgomery Point Lock and Dam is currently being constructed in the White River Entrance Channel to alleviate the low water problem at the entrance of the system. When flows reach 60,000 cubic feet per second at Van Buren, Arkansas, barge tow operators are forced to restrict navigation during these high-flow periods. Floods have impacted navigation interests by restricting navigation from one to two months until velocity of the river slowed enough that barges could safely continue. The first phase of this study investigates flow management strategies to improve the overall economic benefits for navigation on the system by reducing the impacts of high flows from the upper reaches of the Arkansas River watershed. Based on preliminary analysis, it appears that the high velocity periods could be shortened by reallocating or adding additional storage in the existing reservoirs on the system; and by constructing additional lakes and levees for navigational flow management. The second phase of the study will investigate deepening of the navigation system over the entire length of the system and providing passing lanes on the Verdigris River in Oklahoma.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study. Feasibility study activities will include developing numerical hydrologic and hydraulic models of the McClellan-Kerr Arkansas River Navigation System to establish base conditions for analyzing alternatives to minimize the affects of high flood flows, and to continue the studies to investigate deepening of the navigation system. Fiscal Year 2004 funds will be used to continue the feasibility phase of the study.

The completion date for the Phase I of the study is being determined. The completion date for the Phase II and the overall feasibility study is being determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas					
Freeport Harbor	4,800,000	46,000	To Be Determined	250,000	To Be Determined

The Freeport Harbor project is located along the mid to upper Texas coast, and is formed by the improvement of the Brazos River, Texas, from the mouth about 6 miles upstream to Freeport, Texas. It provides for a 47 foot deep, 400 foot wide entrance channel; 45 foot deep, 400 foot wide main channel; 45 foot wide, 750 foot diameter turning basin; 36 foot deep, 200 foot wide Brazos River Harbor channel; and 36 foot deep, 200 foot wide Brazos River Harbor turning basin. The local sponsor, the Brazos River Harbor Navigation District, is interested in examining the feasibility of improvements to the existing deep draft navigation channel and to determine the Federal interest in expanding the reach of the navigation channel to the Stauffer Channel and turning basin. The channel carries traffic that could be accommodated much more efficiently with a deeper (50-55 foot) channel. Many of the vessels that currently serve the chemical and oil industry in the area are light-loaded to enable them to operate in the existing channel resulting in delays. The Brazos River Harbor Navigation District has expressed intent to share equally in the feasibility phase cost that may follow the reconnaissance study.

Fiscal Year 2003 funds are being used to complete the reconnaissance phase of the study. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2003 will also be used to initiate feasibility phase of the study. Fiscal Year 2004 funds will be used to continue feasibility phase studies. The preliminary estimated cost of the feasibility phase is $9,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost is as follows:

Total Estimated Study Cost	$ 9,500,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$ 4,700,000
Feasibility Phase (Non-Federal)	$ 4,700,000

The completion date of reconnaissance phase is March 2003. The Feasibility Cost Sharing Agreement is scheduled to be completed in March 2003. The completion date for the feasibility phase of the study is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Gulf Intracoastal Waterway - High Island Realignments	1,600,000	0	To Be Determined	200,000	To Be Determined

The study area includes approximately 85 miles of the Gulf Intracoastal Waterway (GIWW) in Galveston and Brazoria Counties, from High Island, Texas, to the Brazos River. Tonnage transported along this section of the GIWW totaled nearly 50 million tons in 1994, with petrochemicals as the major commodity shipped. Some of the problems identified by users along this reach include difficulties negotiating the two 90-degree bends west of the Highway 124 bridge at High Island causing steerage problems for tows, making it difficult for even one way traffic; High shoaling rates and associated transit delays at Rollover Pass; the area at Sievers Cove experiences periods of high wind and current causing navigation problems due to the limited clearance between the GIWW and placement area #41, limiting the barges ability to compensate for the wind and current; and problems arise at the Texas City Channel (west wye) due to width restrictions and defective channel markers. Waterway users often continue to the intersections of the Texas City Channel and the GIWW before turning towards Texas City crating an unsafe condition due to currents as tows maneuver a 120 degree turn into a congested area used by ocean-going, deep draft vessels; the cut through Pelican Island provides the last protected area for eastbound traffic before crossing the Galveston causeway. Tows often stop during fast moving tides and high winds, causing congestion at this mooring facility as vessels wait for safe passage through the Galveston causeway. Additionally moored barge s often extend out into the channel making passing through the area difficult requiring extreme care; additional moorings are needed west of the Galveston causeway as during periods of high winds, tows must push onto the bank in the sheltered area near Greens Lake and wait, sometimes for several days. The four miles between Cow and Halls bayous are areas of serious erosion where shoaling often reduces the channel width, limiting traffic to one way. The problem is compounded by cross currents.

Investigations to identify potential solutions to resolve the navigation issues along this reach of the GIWW have been divided into two interim feasibility studies. The first study is the GIWW – High Island to Brazos River, Texas study. The study is addressing potential improvements to the waterway between Rollover Pass and West Bay. The second interim study, the GIWW – High Island to Brazos River Realignments Interim Feasibility, will include evaluation of navigation improvements in negotiating two 90-degree bends near High Island; difficulties negotiating a double “S” curve near Freeport; difficulties negotiating the intersection with the Chocolate Bayou Channel; and developing long range disposal plans.

The State of Texas is the non-Federal sponsor of the GIWW and continues to maintain a high interest in the waterway because of their responsibility to provide dredged material disposal areas. The State's interest is evident through monthly meetings of the State-chaired Gulf Intracoastal Waterway Advisory Committee. The GIWW is designated as part of the Nation's Inland Waterway System, and qualifies for 50-50 cost sharing from the Inland Waterways Trust Fund for construction of navigation improvements. An initial appraisal of the entire 423-mile Texas Section of the GIWW was completed in November 1989. The

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

Texas (continued)

Gulf Intracoastal Waterway - High Island Realignments (continued)

reconnaissance study, completed in February 1995, concluded that modifications to the existing GIWW were economically feasible from reduction in delay benefits.

The Feasibility Study is 100 percent Federally funded. Fiscal Year 2004 funds will be used to initiate the interim feasibility study. The GIWW – High Island to Brazos River Interim Feasibility Study is scheduled to be completed in July 2003. The GIWW - High Island to Brazos River Realignments Interim Feasibility study completion date is being determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Gulf Intracoastal Waterway - Modifications	10,790,000	471,000	To Be Determined	350,000	To Be Determined

The study area encompasses two locations on the Gulf Intracoastal Waterway (GIWW) along the Texas coast. One, the Brazos River Floodgates, is located approximately 7 miles southwest of Freeport, Texas, at the intersection of the Brazos River and the GIWW in Brazoria County. The other, the Colorado River Locks, is located approximately 45 miles southwest of Freeport, Texas, at the intersection of the Colorado River and the GIWW in Matagorda County. Both projects improve navigational safety by controlling traffic flow and currents at these dangerous intersections. Both also serve to control sand and silt deposition at the intersection of the GIWW with the respective rivers. As sediment control structures, they reduce maintenance dredging costs by decreasing the trapping effects of the intersection. The Colorado River Locks have an additional purpose: to raise the navigation traffic from the GIWW to the level of the river during flood stages for crossing the river and lowering the traffic to the level of the GIWW after crossing. Delay costs are estimated to exceed $1 million annually at each location. In addition, the 75-foot gated thruway is too narrow to accommodate the new modern wider barges posing a major safety threat. The crossing was designed when barges were carried astern on a towline rather than the current practice of pushing a string of barges, making navigation of the crossing more difficult. Many tows have to “trip” or break down and moor their barges while taking one barge across at a time, causing delays, particularly during high river stages. Currently, 17 to 25 million tons of commerce pass through these facilities each year. The Gulf Intracoastal Canal Association (GICA) and Texas Waterway Operators Association (TWOA) representing the GIWW users are very interested in improving navigation at these locations. The study objective is to formulate alternative plans that would reduce the navigation difficulties at the crossings, thus reducing the number of accidents, the resulting excessive damages to the facilities and barges, and traffic delays. Potential solutions for minimizing navigation delays and safety concerns include realigning the approaches to the crossings or increasing the width of the gates. The State of Texas, Texas Department of Transportation (TXDoT) is the non-Federal sponsor for this project. Although this study is fully Federally funded, construction of any recommended projects will be cost-shared with the Inland Waterways Trust Fund.

Fiscal Year 2003 funds are being used to continue Feasibility Phase studies.

Fiscal Year 2004 funds will be used to continue Feasibility Phase studies for the Colorado River Locks including socio-economic analysis and environmental analysis. The scheduled completion date for the Colorado River Locks interim feasibility study is to be determined. The scheduled completion date for the Brazos River Floodgates interim feasibility study is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Sabine - Neches Waterway	5,075,000	3,708,000	To Be Determined	300,000	To Be Determined

The Sabine-Neches Waterway, Texas project is located in Beaumont, Orange, Port Arthur, and Sabine Pass in Jefferson and Orange Counties, Texas; and Cameron and Calcasieu Parishes, Louisiana. The Sabine-Neches Waterway is a 75 mile-long deep draft channel which extends from the 42-foot contour of the Gulf of Mexico through a jettied channel to Port Arthur, to Beaumont via the Neches River Channel, and to Orange via the Sabine River Channel. The Sabine-Neches Waterway serves the Ports of Port Arthur, Beaumont and Orange. Modifying the existing Sabine-Neches Waterway would result in a reduction in delays, increased safety, and increased efficiency of transporting commerce on the existing 40-foot deep waterway. Channel depths of 45, 50, and 55 feet will be investigated, as well as increased channel widths. A major effort in this study will be the coordination of environmentally suitable dredged material placement areas for construction materials, as well as for future channel maintenance. The Jefferson County Waterway and Navigation District is the non-Federal Sponsor for the 40-foot Project to Port Arthur and Beaumont, Texas, and the Orange County Navigation District is the non-Federal Sponsor for the 30-foot Sabine River Project. The sponsor for this feasibility study is the Jefferson County Waterway and Navigation District. The Feasibility Cost Sharing Agreement was executed on 6 March 2000.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study. Fiscal Year 2004 funds will be used to continue feasibility study activities, which include design the recommended plan and complete the draft Feasibility Report and EIS. The estimated cost of the feasibility phase is $9,900,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$10,025,000
Reconnaissance Phase (Federal)	$ 125,000
Feasibility Phase (Federal)	$ 4,950,000
Feasibility Phase (Non-Federal)	$ 4,950,000

The completion date for the feasibility phase is to be determined.

SUBTOTAL NAVIGATION STUDIES	28,095,000	7,763,000	To Be Determined	2,170,000	To Be Determined

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

b. Flood Damage Prevention Studies: The amount of $700,000 is requested in Fiscal Year 2004 for continuation of three studies.

Texas

Buffalo Bayou and Tributaries (White Oak Bayou)	2,200,000	715,000	To Be Determined	100,000	To Be Determined

White Oak Bayou, a tributary of Buffalo Bayou, has a drainage area of about 113 square miles and lies entirely within Harris County, Texas. White Oak Bayou rises in west central Harris County and flows in a southeasterly direction, a distance of about 34 miles to its confluence with Buffalo Bayou. Its major tributaries are Little White Oak Bayou, which enters from the north at mile 1.5, Brickhouse Gully, which enters from the west at miles 14.3, Cole Creek, which enters from the west at mile 17.3, and Vogel Creek, which enters from the north at mile 12.4. The primary water resource problem of the study area stems from frequent flooding of residential properties along White Oak Bayou and its tributaries, which is expected to worsen as the area becomes more populated and residential and commercial areas grow. Damaging floods have occurred in the White Oak Bayou Basin in 1935 (the flood of record), 1968, 1969, 1970, 1972, 1979, 1981, 1982, 1983, 1984, 1989, 1992, 1998 and 2001. The 1998 event, from Tropical Storm Frances, produced up to 14 inches of rain, flooded 1,200 homes in this watershed, and caused over $100 million in damages in the Houston and Galveston areas. In June 2001 water from Tropical Storm Allison flooded an estimated 45,000 residences and caused approximately $1.76 billion in damages in the Greater Houston area. An estimated 11,298 homes were flooded in the White Oak Bayou watershed as a result of Tropical Storm Allison. An estimated 1,656 businesses reported damages estimated at $1.08 billion. Colleges and businesses in downtown Houston sustained approximately $25 million in damages. There are over 7,000 structures subject to flooding in the 100 year (one percent chance) floodplain, with property values that exceed $400,000,000. The onetime occurrence of a 100-year (one percent chance) flood would cause property damages of approximately $258,000,000. The first 10.7 miles has been constructed as part of a Federal project authorized in FY 1954 and 1965. Due to extensive residential development of the flood plain and subsidence due to extraction of ground water, the existing project is not effective as constructed. A series of detention reservoirs and channel adjustments in the upper reaches could facilitate drainage in the watershed. The non-Federal Sponsor, the Harris County Flood Control District (HCFCD), will perform the study under the authority of Section 211 of the Water Resources Development Act of 1996 (WRDA 1996), to consider the entire White Oak Bayou Basin, including segments where the Federal project has already been constructed. The HCFCD will be reimbursed for the Federal share of the feasibility and reconnaissance study costs following completion and approval of the reports by the Secretary of the Army (Civil Works). The Reimbursement Agreement is scheduled to be executed in May 2003. The General Reevaluation is scheduled for completion and approval in June 2004.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

Texas (continued)

Buffalo Bayou and Tributaries
(White Oak Bayou) (continued)

Fiscal Year 2003 funds are being used to initiate the reimbursement to the HCFCD of the Federal share of the costs for the completed reconnaissance phase of the study upon approval by the Secretary of the Army (Civil Works), and for Corps of Engineers' coordination costs. Fiscal Year 2004 funds will be used for Corps of Engineers' coordination costs. The preliminary estimated cost of the feasibility phase is $4,140,000, which is to be shared on a 50-50 basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 4,290,000
Reconnaissance Phase (Federal)	$ 150,000
Feasibility Phase (Federal)	$ 2,070,000
Feasibility Phase (non-Federal)	$ 2,070,000

The scheduled completion date for the feasibility phase of the study is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Freeport Hurricane Protection Levee	1,770,000	225,000	To Be Determined	200,000	To Be Determined

Freeport is part of the nine-city Brazosport area, and is the center of a highly industrialized complex, which includes petrochemical and other industrial plants. It is also a deepwater port with related industries and a population of approximately 14,700 people. The existing project consists of a system of levees and pumping stations that protect about 42 square miles from inundation due to hurricanes and tropical storms. The request for the study was precipitated by a recent risk analysis study funded by the Dow Chemical Company. The request cites 6 major changes that have occurred since the original Corps study was completed in 1958: (1) industrial and residential property values have significantly increased, possibly 10 to 100 fold; (2) there has been a significant advancement in computer and modeling technology; (3) there is approximately 40 years of hurricane data available; (4) the Brazos River Harbor and Navigation District and Corps' harbor dredging projects have significantly reduced the ponding area and capacity outlined in the 1958 study; (5) the Drainage District has added significant pumping capacity (3,000,000 gallons per minute) relative to the original constructed project; and (6) possible increased subsidence in the local coastal plain. The study was proposed because of higher flood plain elevations from hurricanes, tropical storms, and related events predicted by the Flood Insurance Administration (FIA) in the Freeport Area. Damages could exceed $100,000,000 if the current levees are overtopped. An initial appraisal was prepared to evaluate the Federal interest in pursuing a reconnaissance study to determine the adequacy of the hurricane flood protection levee at Freeport. The initial appraisal verified the validity of reviewing the current project in light of current flood levels projected by the FIA. The non-Federal Sponsor for the project is the Velasco Drainage District. The Feasibility Cost Sharing Agreement was executed in July 2002.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study. Fiscal Year 2004 funds will be used to continue the feasibility study. The study will assess the engineering, economic, and environmental components of modifying the levees and pump capabilities. The preliminary estimated cost of the feasibility phase is $3,340,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$3,440,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$1,670,000
Feasibility Phase (Non-Federal)	$1,670,000

The reconnaissance phase was completed in July 2002. The completion date for the feasibility phase is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Upper Trinity River Basin	11,810,000	8,165,000	To Be Determined	400,000	To Be Determined

The Upper Trinity River basin extends upstream from the confluence of the East Fork and the main stem of the Trinity River, and has a drainage area of approximately 7,873 square miles and includes the Dallas-Fort Worth, Texas, Metroplex. This area had an estimated 2001 population of over 5.5 million. Urban development of the Metroplex has greatly exceeded original expectations. In turn, the magnitude of storm runoff has increased beyond the original values used in design of these existing floodway projects; and thus reducing their effectiveness. Further, future development trends within the Dallas-Fort Worth Metroplex stand to worsen existing flooding potential. It is estimated that in the event of the Standard Project Flood, approximately 87,700 acres of flood plain properties within the Dallas-Fort Worth Metroplex would be inundated, resulting in an estimated $14.0 billion in damages. Major floods occurred May-June 1989 and in April-May 1990. In the April-May 1990 floods, over $300 million in flood damages occurred and three lives were lost. In 1990, all of the Corps lakes in the Upper Trinity River Basin were either close to the top of, or overflowing the spillway. Existing flood control projects in the Upper Trinity River Basin prevented a total estimated $318 million in damages in l989 and $4 billion in 1990. Flooding during January 1992 resulted in 9 deaths, over 200 homes and 12 businesses inundated, and millions of dollars in damages. In August 2001, a man drowned in the West Fork of the Trinity River during a rain event. In March 2002, a man drowned in the Trinity River in east Fort Worth during a multiple day rain event. The North Central Texas Council of Governments is the local sponsor representing sixteen communities, three counties, and the Tarrant Regional Water District. Study efforts have been directed to addressing improvements in the interest of flood protection, environmental restoration, water quality, recreation, and other allied purposes in the Upper Trinity River Basin with specific attention on the Dallas-Fort Worth Metroplex. Phase I of this two-phase feasibility study, which established base conditions, was completed in February 1995. Preliminary plan identification completed during Phase I for flood damage reduction, ecosystem restoration, and recreational projects identified 88 potential measures, which are economically viable. The results of these analyses were compiled into an Information Paper that was formally released to the public on 6 February 1995.

The Information Paper served as the basis for gaining sponsor commitments for undertaking more detailed studies of potential projects. To date, Project Study Plans (PSP)/Project Management Plans (PMP) that establish specific project and specific study cost sharing have been developed for the Dallas Floodway and Stemmons North Industrial Corridor, Texas; Johnson Creek, Arlington, Texas; Fort Worth Sumps, Multipurpose Reevaluation of the Clear Fork/West Fork, Fort Worth, Texas, Big Fossil Creek Watershed, and Lake Worth Watershed, Texas. The Johnson Creek, Arlington, Texas, Interim Feasibility Report was finalized in March 1999. The Dallas Floodway and Stemmons North Industrial Corridor, Texas, Interim Feasibility Study scheduled completion date to be determined. The Clear Fork/West Fork Multipurpose Reevaluation Interim Feasibility Study was initiated in September 2000. The Big Fossil Creek Watershed Interim Feasibility Study was initiated in February 2001. The

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Upper Trinity River Basin (continued)					
Lake Worth Watershed Interim Feasibility Study was initiated in November 2001. The Riverside Oxbow and Central City studies are interims of the on-going Clear Fork/West Fork Multipurpose Reevaluation Interim Feasibility Study under the Upper Trinity. Additional Project Management Plans will be formalized prior to initiation of the feasibility studies for other potential projects where local sponsor interest prevails.					
Fiscal Year 2003 funds are being used to continue the Dallas Floodway and Stemmons North Industrial Corridor study, Clear/West Forks and Big Fossil Creek Watershed studies. The funds requested for Fiscal Year 2004 will be used to continue the interim feasibility studies for the Dallas Floodway and Stemmons North Industrial Corridor, the Multipurpose Reevaluation of the Clear Fork/West Fork of the Trinity River Basin, and the Big Fossil Creek Watershed; and complete the interim feasibility study for the Lake Worth Watershed. The Feasibility Cost Sharing Agreement is $22,000,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. Up to 100 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:					
Total Estimated Study Cost $ 22,810,000 Reconnaissance Phase (Federal) 810,000 Feasibility Phase (Federal) 11,000,000 Feasibility Phase (non-Federal) 11,000,000					
The reconnaissance phase was completed in August 1990. As each study is completed, interim feasibility reports will be issued. The final Big Fossil Creek Watershed Interim Feasibility Study scheduled completion date is to be determined. The Clear Fork/West Fork Interim Feasibility Study scheduled completion date is to be determined. The Riverside Oxbow (under the Clear Fork/West Fork) Interim Feasibility Study scheduled completion date is to be determined. The Central City (under the Clear Fork/West Fork) Interim Feasibility Study scheduled completion date is to be determined. The Dallas Floodway and Stemmons North Industrial Corridor Interim Feasibility Study scheduled completion date is to be determined. The Lake Worth Watershed Interim Feasibility Study scheduled completion date is to be determined. The overall feasibility study scheduled completion date is to be determined.					
SUBTOTAL FLOOD DAMAGE PREVENTION STUDIES	15,800,000	9,105,000	To Be Determined	700,000	To Be Determined

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

c. Shoreline Protection Studies: None.

d. Special Studies: The amount of $2,499,000 is requested for Fiscal Year 2004 for continuation of twelve studies.

Kansas

Walnut and White River Watersheds	545,000	152,000	To Be Determined	160,000	To Be Determined

The Walnut River Basin covers about 2,000 square miles in southeastern Kansas. The Walnut River combines with the Arkansas River at Arkansas City, which flows across the Kansas-Oklahoma State Line within about 10 miles of Arkansas City. The city of Wichita is located immediately west of the basin. The US Fish and Wildlife Service (USFWS) estimated that Kansas has lost almost 50 percent of its wetlands since the 1980's, with the vast majority of the losses since 1950. The loss of these wetlands means urban and rural runoff previously "filtered naturally" before entering a watercourse now enters the stream directly. Undisturbed riparian habitat of timber, brush, grasses, and wetlands once existed along both banks of over 600 miles of primary watercourses within the basin. Through coordination with stakeholders and based on prior experience with basin studies, it was concluded that riparian habitat coverage and quality has decreased, and losses are still occurring. The result is both a reduction in area and ecological system viability due to fragmentation. Some of the measurable losses include wildlife density, reductions in animal and plant species, and significant reductions in water quality. The recommended plan is a collection of standard ecosystem management measures to be implemented in a basin-wide riparian and riverine ecosystem restoration and preservation approach. About a dozen state and Federal Environmental Agencies will participate as team members in the feasibility study. The feasibility study will identify ecosystem resources, evaluate the system qualities, determine past losses and current needs, and evaluate potential restoration and preservation measures. Justified collections of measures, that are found to be warranted and acceptable to the sponsor and the Federal government, will be recommended for implementation through a prioritized, multi-year, plan of incremental design and development. In part this plan will allow monitoring of implemented restoration measures, which will provide opportunities to revise and improve the application of standard best management practices for this basin application. The scope of the study focuses on basin floodplain resources, including riverine and riparian ecosystem components. The sponsor for the feasibility phase of the study is the Kansas Water Office. The Feasibility Cost Sharing Agreement was executed in November 2001.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2004 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $890,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

Kansas (continued)

Walnut and White River Watersheds (continued)

Total Estimated Study Cost	$ 990,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$ 445,000
Feasibility Phase (Non-Federal)	$ 445,000

The reconnaissance phase was completed in November 2001. The completion date for the feasibility phase of the study is being determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Missouri					
Springfield	1,650,000	63,000	To Be Determined	230,000	To Be Determined

The study area is along Jordan Creek in the heart of the City of Springfield, Missouri. Jordan Creek is an urban stream, which was channelized (vertical wall concrete channel with a portion in downtown Springfield being underground culverts) in the 1930's. Development in the basin has increased flows. The capacity of the channel to carry flows above approximately a 10-year event is exceeded causing flood damages to businesses, industry, residential, utilities, and transportation. The last flood was in July 2000 and was estimated to be an 100-year event. The value of structures in the 500-year flood plain is $75,000,000. Environmental restoration in the flood plain of previously developed lands would also be addressed. Wetland creation and fishery habitat will be considered in areas that now or previously had quarries, railroad yards, concrete plants and other development. The study would determine whether there is a Federal interest in environmental restoration and flood damage reduction measures in the study area. Possible solutions to water resource problems include non-structural flood damage measures, development of environmental and floodplain buffer zones along the river, creation of floodplain overflow wetlands, channel modification or clearing and snagging to improve channel capacities, and combinations of those alternatives. The City of Springfield understands the cost sharing requirements and would be the local sponsor. The Feasibility Cost Sharing Agreement is scheduled to be executed in March 2003.

Fiscal Year 2003 funds are being used to fully fund the reconnaissance phase at full Federal Expense. If the reconnaissance report is certified to be in accord with policy, the funds requested in Fiscal Year 2003 will also be used to continue into the feasibility phase of the study. Fiscal Year 2004 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $3,100,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,200,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$1,550,000
Feasibility Phase (Non-Federal)	$1,550,000

The reconnaissance phase is scheduled to be completed in March 2003. The completion date for the feasibility phase of the study is being determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Oklahoma					
Oologah Watershed	2,362,000	73,000	To Be Determined	259,000	To Be Determined

The study area includes the 4,339 square mile drainage basin of the Verdigris River Basin in southeastern Kansas and northeastern Oklahoma upstream of Oologah Lake, OK, a Corps of Engineers multipurpose reservoir. The study area also includes Elk City, Fall River, Toronto, and Pearson-Skubitz Big Hill Lakes in Kansas, all multipurpose lakes constructed by the Corps of Engineers. Oologah Lake was authorized by the Flood Control Act of 1938 for flood control, water supply, navigation, recreation, and fish and wildlife. Construction of the project was completed in 1974. The Verdigris River is on the State of Oklahoma's list of impaired waters due to siltation, suspended solids, and pesticides. Loss of aquatic habitat due to degradation of the lake and basin water quality is occurring at an increasing rate as the population around the lake increases and as development in the basin occurs. The State of Oklahoma has expressed concern about the loss of habitat, water quality, fish kills and the accompanying loss of tourism and other economic benefits for the region as a result of declines in the water quality and related aquatic habitat. An initial appraisal report was completed in Fiscal Year 2002. The report found a Federal interest in proceeding with feasibility phase studies. The feasibility study will identify potential measures to restore the ecosystem in the basin and will evaluate other water resource problems and potential solutions. Potential solutions include development of wetlands to provide habitat and improve water quality for aquatic ecosystems, restoration of riverine corridors, development of a comprehensive watershed plan, and other measures. The sponsor for the feasibility phase of the study is the Tulsa Metropolitan Utility Authority. The Feasibility Cost Sharing Agreement was executed in July 2002.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2004 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $4,624,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,674,000
Reconnaissance Phase (Federal)	50,000
Feasibility Phase (Federal)	2,312,000
Feasibility Phase (Non-Federal)	2,312,000

The reconnaissance phase was completed in July 2002. The completion date for the feasibility phase of the study is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Oklahoma (continued)					
Southeast Oklahoma Water Resource Study	3,586,000	191,000	To Be Determined	50,000	To Be Determined

The study area encompasses 29 counties in southeast Oklahoma, including the Kiamichi River Basin and other tributaries of the Red River. The reconnaissance study examined water resource related problems in southeast Oklahoma and found a federal interest in ecosystem restoration in the Kiamichi River Basin. The cumulative effects of land use changes in the basin have resulted in a loss of habitat for a number of aquatic species that are critical to the functioning of the riverine ecosystem. The loss of habitat is noticeable in the declining populations of a number of species of mussels—indicator species. Current substrate and stream flow conditions could result in continued loss of these indicator species that would in turn result in a loss of significant habitat and food resources for other aquatic fauna, thus disrupting the entire riverine ecosystem. The study focuses on ways to re-establish substrate and stream flow conditions more suitable to the affected indicator species, such as requiring sustained minimum flows or altering the thermal regime of releases from upstream reservoirs. The cost-sharing sponsor for the feasibility phase of the study is the Oklahoma Water Resources Board. The Feasibility Cost Sharing Agreement was executed in July 2001.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2004 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $6,952,000, which will be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 7,062,000
Reconnaissance Phase (Federal)	$ 110,000
Feasibility Phase (Federal)	$ 3,476,000
Feasibility Phase (Non-Federal)	$ 3,476,000

The reconnaissance phase was completed in July 2001. The completion date for the feasibility phase of the study is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas					
Guadalupe and San Antonio Rivers	3,915,000	971,000	To Be Determined	150,000	To Be Determined

The study area includes the Guadalupe and San Antonio River Basins. It is located in south central Texas, extending approximately 110 miles southeasterly from the headwaters in Kerr and Bandera Counties, to the terminus at the Gulf of Mexico in Refugio and Calhoun Counties. The Guadalupe Basin has a drainage area of 6,700 square miles, and the San Antonio River Basin has 4,180 square miles. Flooding within various portions of the basin was severe in 1972 and in 1978, when portions of the river basins were declared disaster areas. Flooding again plagued the area in 1997, with total damages estimated at $1.9 million. In October 1998, the largest of all recent flood events within the region accounted for at least 31 deaths, and caused damages estimated to be $300 million. Many communities experienced inundation to rooftop levels, with water velocities great enough to completely demolish brick homes. The most recent flood event, in June-July 2002, resulted in 9 deaths in the study area. Significant impact was felt in New Braunfels, on the Guadalupe River where flooding destroyed approximately 100 homes and 10 businesses, and had a negative impact on the tourism industry, a major generator of income in this area. The study consists of an investigation of the Guadalupe and San Antonio River Basins to address improvements in the interest of flood damage reduction, environmental restoration, water quality, water supply, recreation and other allied purposes. Both structural and nonstructural solutions will be investigated to reduce flood damages while addressing the environmental needs of the watershed. Initial studies have identified potential water resource opportunities in the Cibolo, Leon, and Salado watersheds and the region encompassed by the Goliad, Karnes, and Wilson Counties. The Cibolo Creek Interim Feasibility Study is being funded under the Guadalupe and San Antonio Rivers Study. The interim feasibility studies for the Leon Creek Watershed, Salado Creek Watershed, and the Tri-County Flood Study, San Antonio River, Interim Feasibility Studies are being funded under separate requests. The Guadalupe-Blanco River Authority, San Antonio River Authority, and the San Antonio Water System support the proposed studies. The Feasibility Cost Sharing Agreement was signed on 20 February 2002.

Fiscal Year 2003 funds are being used to continue the Cibolo Creek Interim Feasibility Study. Fiscal Year 2004 funds will be used to initiate the second phase of the Cibolo Creek Interim Feasibility Study. The preliminary estimated cost of the overall feasibility study is $6,830,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$7,330,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	3,415,000
Feasibility Phase (non-Federal)	3,415,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

Texas (continued)

Guadalupe and San Antonio Rivers (continued)

The overall feasibility study completion date is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Lower Colorado River	15,995,000	2,152,000	To Be Determined	600,000	To Be Determined

The Lower Colorado River basin encompasses a geographic area of approximately 21,000 square miles, and includes portions of the following counties in Central and South Texas: Bastrop, Blanco, Burnet, Colorado, Fayette, Hays, Lampasas, Llano, Matagorda, Mills, San Saba, Travis, and Wharton. The northernmost reaches of the study area include the Highland Lakes upstream of Austin, while the southernmost boundary is the Gulf of Mexico. The Guadalupe, Lacava, and Colorado-Lavaca basins bound the study area on the west, and the Brazos and Brazos-Colorado basins on the east. The major Texas metropolitan areas within the study boundaries are Austin, Bastrop, Bay City, Columbus, LaGrange, Marble Falls, and Wharton. In October 1998, widespread flooding and related damages occurred throughout the Lower Colorado River Basin. A major component of the basin is the Onion Creek watershed, which originates in Blanco County, continues through Hays County, and then into Travis County, where the creek flows into the Colorado River. The Onion Creek study area is located in the Colorado River Basin, and within the rapid growing urban area of Austin, Texas. Onion Creek is the largest creek in the Austin area with a drainage area of 343 square miles, collecting flows from Williamson, Slaughter, Bear, Little Bear, Rinard, South Boggy, Marble and Cottonmouth Creeks and their tributaries. The creek has a long history of flooding dating back to 1869 and most recently in 1981, 1991, 1998, 2001 and 2002. The flooding along Onion Creek in November 2001 was near the flood of record. The city of Wharton was declared a disaster area in the most recent flood events of October 1998 and September 2002. Eleven flood events have occurred since 1900, resulting in extensive flood damages and the loss of seven lives. Flows in excess of the 100-year, one percent chance, events have occurred on two separate occasions, while the 50-year (two percent chance) event has occurred on two other occasions. The reconnaissance study of the Lower Colorado Basin identified several areas that have experienced severe flooding and present a very high risk for flooding catastrophe. In addition to Onion Creek, Shoal and Walnut Creeks, the Highland Lakes, and the city of Wharton have experienced increased flooding and alteration of wildlife habitats. Initially, a cost-shared basin-wide feasibility study has identified the problems, needs, and opportunities of the Lower Colorado River basin and is focusing on identifying problem areas where potentially viable implementation measures exist and a cost-sharing sponsor is available to cost-share interim feasibility studies. Interim feasibility studies of Onion Creek, and the city of Wharton are being conducted concurrently with the basin-wide study. Interim studies for Shoal and Walnut Creeks and the Highland Lakes are also scheduled to be conducted under the Lower Colorado River Basin Study. The Lower Colorado River Authority is the local sponsor for the feasibility study and will act on behalf of the cities of Austin and Wharton, Travis County, and other entities identified during the problem identification stage of basin-wide feasibility studies.

Fiscal Year 2003 funds are being used to continue the basin-wide feasibility study, continue the concurrent interim feasibility studies for Onion Creek and the city of Wharton. Fiscal Year 2004 funds will be used to continue the basin wide

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

Texas (continued)

Lower Colorado River (continued)

feasibility study and continue the Onion Creek and Wharton Interim Feasibility Studies. The preliminary estimated cost of the overall feasibility phase and six additional interim studies is $31,740,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 31,865,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	15,870,000
Feasibility Phase (non-Federal)	15,870,000

The completion dates for the interim feasibility studies on the Onion Creek and the city of Wharton are to be determined. The basin-wide feasibility study completion date is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Middle Brazos River	1,755,000	822,000	To Be Determined	50,000	To Be Determined

The study area is located within the middle portion of the Brazos River Basin, which is bounded on the northwest by the Clear Fork of the Brazos River and on the southeast by Yegua Creek, and includes all or part of 32 counties. Urbanization and concurrent changes in land use to support the human environment have caused many changes in the ecological character of the Middle Brazos River Basin, and have resulted in significant adverse impacts to the natural environment. The reconnaissance study included three major sub-basins; the North Bosque, Leon and the Lampasas. The North Bosque sub-basin is the most impacted of the three at present. A trends analysis conducted during this study indicated that if the environmental conditions continue as they have for 30 years, the quality of the environment will continue to degrade in the future. Consequently, the North Bosque River has been placed on the 1998 Clean Water Act Section 303(d) list by the Environmental Protection Agency. One of the purposes of this study is to develop, evaluate and recommend plans for ecosystem restoration and water quality improvements. Potential solutions include possible ecosystem restoration projects in areas of all existing lakes in the Middle Brazos River Basin. Work to be performed consists of feasibility level studies to investigate alternatives to re-establish aquatic and wildlife habitats. Projects identified in the reconnaissance phase include riparian corridor reforestation, wetlands and combinations of these alternatives. The study area also includes 19 Federal and non-Federal reservoirs. Population growth in the basin has necessitated an evaluation of current water management strategies. A second purpose of this study is to determine if existing water resources can be better allocated to meet the changing needs of the basin. The Brazos River Authority and the city of Waco, Texas, support the proposed study. The Brazos River Authority signed the Feasibility Cost Sharing Agreement on 30 September 1999.

Fiscal Year 2003 funds are being used to continue the North Bosque Interim Feasibility Study and to initiate the System Assessment Interim Feasibility Study. Fiscal Year 2004 funds will be used to continue the overall feasibility study, continue the System Assessment Interim Feasibility Study, and to complete the North Bosque River Interim Feasibility Study. The preliminary estimated cost of the feasibility phase is $2,490,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 3,000,000
Reconnaissance Phase (Federal)	510,000
Feasibility Phase (Federal)	1,245,000
Feasibility Phase (Non-Federal)	1,245,000

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

Texas (continued)

Middle Brazos River (continued)

The completion dates for the North Bosque River and System Assessment Interim Feasibility Studies are to be determined. The overall Middle Brazos River Feasibility Study completion date is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Nueces River and Tributaries	2,140,000	100,000	To Be Determined	100,000	To Be Determined

The Nueces River Basin lies in the southern part of Texas. The West Nueces River heads in Edwards County about 13 miles northwest of Rocksprings, Texas. The East Nueces River heads near the northwest corner of Real County about 16 miles northeast of Rocksprings, Texas and flows about 55 miles south to its confluence with the West Nueces River. The Nueces River then flows in a southeasterly direction and enters Nueces Bay near Corpus Christi, Texas. The Nueces River Basin has an overall length of approximately 235 miles, a maximum width of 115 miles, and has a total drainage area of 17,075 square miles. The Frio River is a principal tributary and drains the northeast edge of the Nueces River Basin. The Edwards Plateau accounts for about 20 percent of the basin and is recognized to have high potential for ground water recharge. Historic land use practices and poor water management have resulted in significant environmental degradation and diminished habitat suitability of approximately 20,000 acres of the Nueces delta area. Additionally, existing surface and ground water sources are not sufficient to assure an adequate water supply to fulfill future needs. The reconnaissance study was completed in December 2002. The study identified Federal interest in evaluating opportunities in the study area for environmental restoration, water quality, water supply, flood damage reduction, recreation, and other allied purposes. The study sponsor is the Nueces River Authority. Other potential sponsors include the San Antonio Water System, city of Corpus Christi, San Antonio River Authority, the Guadalupe-Blanco River Authority and the San Patricio Municipal Water District.

Fiscal Year 2003 funds are being used to complete the reconnaissance phase and initiate the feasibility phase of the study. Fiscal Year 2004 funds will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 4,140,000
Reconnaissance Phase (Federal)	140,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase of the Nueces River and Tributaries study is scheduled to be completed in June 2003. The feasibility study completion date is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Resacas at Brownsville	2,280,000	280,000	To Be Determined	300,000	To Be Determined

The study area is located in the City of Brownsville along the Rio Grande in South Texas. The city is requesting a study of the resacas of the Rio Grande. Resacas are small lakes and reservoirs formed from the meandering of the Rio Grande, and are capable of providing a certain level of flood protection for the city (similar to detention reservoirs). During the past ten years, siltation and plant growth have reduced the capacity of the resacas, and the city would like to investigate economical ways of restoring and preserving the resacas as natural, low-cost, effective flood protection. In addition, noxious weeds, such as hydrilla and water hyacinth, are jeopardizing the only surface water supply for the city. Along with the Rio Grande, the City's resacas are the last vestige of usable surface water for the area. The resacas become more valuable as time passes given the unpredictable nature of the contamination in the Rio Grande and the continuing drought conditions that have impacted all of South Texas. The study effort will evaluate the environmental restoration of the resacas, improved flood protection, and enhanced water storage. This study will be closely coordinated with the stakeholder members of the Consortium of the Rio Grande (CoRio) as part of the American Heritage Rivers Initiative. The Non-Federal Sponsor for the project is the Brownsville Public Utilities Board, who has indicated intent to share equally in the feasibility phase cost that would follow a successful reconnaissance study. The FCSA was executed in 17 April 2002.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study. The feasibility study will assess the engineering, economic, and environmental components of restoring the resacas. Work will include surveys, hydraulic analysis, water and sediment quality surveys, and benefit determinations. Fiscal Year 2004 funds will be used to continue—feasibility studies. The preliminary estimated cost of the feasibility phase is $4,360,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$ 4,460,000
Reconnaissance Phase (Federal)	$ 100,000
Feasibility Phase (Federal)	$ 2,180,000
Feasibility Phase (Non-Federal)	$ 2,180,000

The reconnaissance phase was completed in February 2002. The completion date for the feasibility phase of the study is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Sabine Pass to Galveston Bay	3,365,000	567,000	To Be Determined	450,000	To Be Determined

The study area consists of approximately 90 miles of Gulf of Mexico shoreline in Jefferson, Chambers, and Galveston Counties along the upper Texas coast from Sabine Pass to San Luis Pass at the western end of Galveston Island. In the entire study area, over 200 houses and up to 40,000 people are affected by shore erosion. The major problems identified in the reach to the north of Galveston Bay are potential destruction of nationally significant wetlands; damage to homes and commercial property; and significant damage to State Highway 87, caused by shoreline erosion. Interest has been expressed in a project to stabilize the shoreline and thus protect nationally significant wetlands and other resources. The area traverses 12 miles of the 81,700-acre McFaddin Marsh National Wildlife Refuge and approximately 2-1/2 miles of the 15,100-acre Sea Rim State Park. Sea Rim State Park is located in the easterly portion of the study area, approximately 10 miles west of Sabine Pass with McFaddin Marsh Refuge immediately to the west. Along the Galveston Island, Texas reach of the study area, erosion rates in excess of 8 feet per year are occurring beyond the limits of the seawall in Galveston, Texas. This erosion, if continued, will result in damages to several beach communities. It has been demonstrated that an economically feasible project could be developed as a result of studies completed in the mid-1980s for a Galveston Island Beach Erosion Study. A number of alternatives have been proposed, including beach nourishment and stone protection. The non-Federal Sponsors for the project are Galveston and Jefferson Counties. A Feasibility Cost Sharing Agreement was executed on 6 September 2001.

Fiscal Year 2003 funds are being used to continue the feasibility phase of the study. Funds requested in Fiscal Year 2004 will be used to continue feasibility phase studies. The preliminary estimated cost of the feasibility phase is $6,560,000, which will be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$6,645,000
Reconnaissance Phase (Federal)	$ 85,000
Feasibility Phase (Federal)	$3,280,000
Feasibility Phase (non-Federal)	$3,280,000

The completion date for the feasibility phase is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Sulphur River Environmental Restoration	2,130,000	79,000	To Be Determined	50,000	To Be Determined

The study area includes the Sulphur River, beginning at Wright Patman Lake and extending to the upper reaches of the basin, including the North Sulphur River. The study area includes portions of Lamar, Delta, Hopkins, Franklin, Red River, Fannin, Hunt Bowie, Cass, Morris and Titus counties. The combination of increased flow velocities due to previous straightening and channelizing efforts along the North Sulphur River, highly erodible riverbanks, and significant land clearing upstream of Highway 37 has created a massive accumulation of sediment and debris downstream of Highway 37. The loss of a steady water supply for the original meanders and oxbows within the North Sulphur River system has caused degradation of aquatic and bottomland hardwood habitat values in these areas. The erosive action caused by increased flow velocities in the river channel is likely to threaten the structural integrity of at least nine bridges spanning the North Sulphur River. The duration of floodwater inundation on adjacent agricultural property, due to the inability of the lands to drain to the river because of river sedimentation, necessitates pumping floodwaters from these lands at a cost of up to $50,000 per year. A December 2001 flood inundated approximately 8,000 acres, with landowners incurring pumping costs estimated at $200,000. Consequently, crop production has decreased while production costs have increased. The identified problems and needs within the study area show a trend of escalating flood damages and increased ecosystem degradation, creating greater potential for loss of life. Potential project alternatives include development of multi-purpose reservoirs located on the North Sulphur River for potential flood damage reduction, ecosystem restoration, and water supply; development of wetlands to provide habitat and improve water quality for aquatic ecosystems; restoration of riverine corridors; development of a comprehensive watershed plan; and other measures. The feasibility studies would also evaluate the potential for construction of new multipurpose reservoirs, and review the system operation of existing Corps of Engineers' Lakes Wright Patman and Jim Chapman to determine if existing water resources can be better allocated to meet the changing needs of the region. The Sulphur River Basin Authority has indicated interest in being the non-Federal sponsor of this study. Other potential sponsors include the city of Dallas, the Tarrant Regional Water District and the North Texas Municipal Water District.

Fiscal Year 2003 funds are being used to complete the reconnaissance study. If the reconnaissance study is certified to be in accordance with policy, funds will be used to continue into the feasibility study. Fiscal Year 2004 funds will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $4,060,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Sulphur River Environmental Restoration (continued)					
Total Estimated Study Cost	4,160,000				
Reconnaissance Phase (Federal)	100,000				
Feasibility Phase (Federal)	2,030,000				
Feasibility Phase (Non-Federal)	2,030,000				

The reconnaissance phase is scheduled to be completed in June 2003. The feasibility study completion date is to be determined

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Tri-County Flood Study San Antonio River	775,000	25,000	To Be Determined	100,000	To Be Determined

The study area is located in the south central Texas counties of Karnes, Wilson, and Goliad, extending southeasterly from the city of San Antonio, Texas, along the San Antonio River. The study is an interim feasibility from the Guadalupe and San Antonio River Basins feasibility study. The largest of all recent flood events in the region, the October 1998 flood event, 15-20 homes in Goliad County were impacted. Approximately 80 homes and 575 mobile homes were either lost or damaged in Wilson County and total losses were estimated at $147.5 million, encompassing almost all in the cities of La Vernia and Floresville. In a subsequent July 2002 flood event, the San Antonio River Basin sustained more than an estimated 16 inches of rainfall in six days resulting in 8 deaths, 280 homes damaged, and $8.9 million in estimated infrastructure damages. Communities experienced inundation to rooftop levels, resulting in virtual submersion of towns located along the river. The study consists of an investigation of the San Antonio River and contributing tributaries within Wilson, Karnes and Goliad counties to address improvements in the interest of flood damage reduction, ecosystem restoration, recreation and other allied purposes. Both structural and nonstructural solutions will be investigated to reduce flood damages while addressing the environmental needs of the watershed. The study will investigate the flood issues of communities along the San Antonio River. The San Antonio River Authority has stated their intent to act as the local sponsor, and is willing to share in the feasibility study costs. The Feasibility Cost Share Agreement is scheduled to be executed in March 2003.

Fiscal Year 2003 funds are being used to continue into the feasibility phase of the study. Fiscal Year 2004 funds will be used to continue the feasibility study. The preliminary estimated cost of the feasibility study is $1,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 1,525,000
Reconnaissance Phase (Federal)	25,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (non-Federal)	750,000

The Tri-County Flood Study, San Antonio River, Texas, interim feasibility study completion date is being determined.

SUBTOTAL SPECIAL STUDIES	40,498,000	5,475,000	To Be Determined	2,499,000	To Be Determined

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

e. Comprehensive Studies: None.

f. Project Review Studies: The amount of $761,000 is requested in Fiscal Year 2004 for continuation of two studies.

Texas

Gulf Intracoastal Waterway - Brazos River to Port O'Connor	5,050,000	3,401,000	To Be Determined	361,000	To Be Determined

The study area includes approximately 72 miles of the Gulf Intracoastal Waterway (GIWW) in Brazoria, Matagorda and Calhoun Counties, from the Brazos River near Freeport to Port O'Connor, Texas. Tonnage transported along this section of the GIWW totaled nearly 16 million tons in 1994, with petrochemicals as the major commodity shipped. This study will evaluate operational problems along this reach of the GIWW. An initial appraisal of the entire 423-mile Texas Section of the GIWW was completed in November 1989. Initial problems identified by users along this reach include difficulties navigating currents encountered as a result of river flows from the San Bernard; high shoaling at Jones Creek, bank erosion at miles 408-420 and 446-451, safety concerns and dangerous currents across Matagorda Bay (mile 454-473), and delays and one-way traffic at Caney Creek (mile 420). Gulf Intracoastal Waterway Users have identified safety issues at the Matagorda Ship Channel crossing due to high shoaling rates and tidal currents. One possible solution to reduce navigation operational difficulties was to relocate the channel across portions of Matagorda Bay. In order to expedite identifying a viable solution to these safety issues, the Matagorda Bay reach was studied separately as an interim to the overall feasibility study. The bank erosion at miles 408-420 and 446-451 and shoaling at Jones Creek have been removed from the study due to recent communication with the waterway users indicating there is not a navigation problem. Potential feasibility study areas to be evaluated include concerns at the San Bernard River and possible bend easing at Caney Creek. Possible modifications to the existing Environmental Impact Statement and development of long term dredged material plans will be addressed independently using Operation and Maintenance, General appropriations. The State of Texas is the non-Federal Sponsor of the GIWW and continues to maintain a high interest in the waterway because of the economic importance of the waterway to the State and their responsibility to provide dredged material disposal areas. The GIWW is designated as part of the Nation's Inland Waterway System and qualifies for 50-50 cost sharing from the Inland Waterways Trust Fund for construction purposes. No feasibility cost sharing agreement is required, and all study costs are 100 percent Federal.

Fiscal Year 2003 funds are being used to continue analyses for Caney Creek. Fiscal Year 2004 activities include continuation of feasibility analyses for the problem areas. The reconnaissance phase was completed in August 1998. The GIWW-Matagorda Bay Interim Feasibility Study was completed in June 2002. The completion date for the overall feasibility study is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Gulf Intracoastal Waterway - Port O'Connor to Corpus Christi Bay	5,900,000	2,369,000	To Be Determined	400,000	To Be Determined

The study area includes approximately 79 miles of the Texas section of the main channel of the Gulf Intracoastal Waterway (GIWW), extending from Port O'Connor to the Kennedy Causeway at Corpus Christi Bay. Tonnage transported along this section of the GIWW totaled nearly 16 million tons in 1994. The purpose of this study is to evaluate operational problems and address environmental concerns along this reach of the waterway. Thirty-one (31) miles of this reach of the waterway are within the critical habitat of the endangered whooping crane. This segment has been addressed under a separate feasibility study for the Aransas National Wildlife Refuge, and is therefore excluded from consideration. Navigational difficulties caused by frequent shoaling at various locations within the remainder of this reach, traffic congestion near Port O'Connor, and the lack of navigational aids and mooring facilities have been previously identified by users as areas of concern. The State of Texas is the non-Federal Sponsor of the GIWW and continues to maintain a high interest in the waterway because of the economic importance of the waterway to the State and their responsibility to provide dredged material disposal areas. The GIWW is designated as part of the Nation's Inland Waterway system, and therefore qualifies for 50-50 cost sharing from the Inland Waterways Trust Fund for construction of navigation improvements. Any potential environmental restoration projects identified by this study will require a cost sharing sponsor. Potential structural solutions may involve channel rerouting across Corpus Christi Bay, widening to relieve traffic congestion at Port O'Connor and Victoria Wye, stabilizing of banks in critical locations to relieve channel shoaling problems, and the coordination and locating mooring facilities for holding vessels during inclement conditions. Other solutions may include restoration of areas previously impacted by project construction or subsequent maintenance activities, restoration of wetland habitat lost as a result of project usage, and dredging of circulation channels between designated dredged material disposal areas.

Fiscal Year 2003 funds are being used to initiate design details, plan selection, construction costs, and to prepare the draft engineering appendix and environmental assessment. Fiscal Year 2004 funds will be used to continue preparation of the engineering appendix and environmental assessment for inclusion in the Feasibility Report. The project is designated as part of the inland waterways. No feasibility cost sharing agreement is required, and all study costs are 100 percent Federal. The completion date for the feasibility phase of the study is to be determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
SUBTOTAL PROJECT REVIEW STUDIES	10,950,000	5,770,000	To Be Determined	761,000	To Be Determined
TOTAL SURVEYS - CONTINUING	95,343,000	28,113,000	To Be Determined	6,130,000	To Be Determined
TOTAL SURVEYS	96,413,000	28,633,000	To Be Determined	6,361,000	To Be Determined

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW

a. Environmental: The amount of $350,000 is requested for Fiscal Year 2004 to initiate PED activities on one project.

Texas

Riverside Oxbow, Upper Trinity Basin, Fort Worth	525,000	0	To Be Determined	350,000	To Be Determined

The project area is located in the city of Fort Worth, Texas. It consists of ecosystem restoration of 570 acres of flood plain lands, two miles of Oxbow River Channel, 50 acres of wetlands, and associated recreation, located in the city of Fort Worth, Texas, within the Trinity River Basin. The estimated total project cost for Riverside Oxbow, Texas, is $17,381,000, with an estimated Federal share of $11,080,000, and a non-Federal share of $6,301,000. The feasibility report was completed in September 2003. The local sponsor, Tarrant Regional Water District, understands the cost-sharing policy, and has stated their intent to be the cost-sharing sponsor for the project by a letter dated April 22, 2002. Preconstruction Engineering and Design will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$ 700,000	Total Estimated Preconstruction Engineering and Design Costs	$ 700,000
Initial Federal Share	$ 525,000	Ultimate Federal Share	$ 455,000
Initial Non-Federal Share	$ 175,000	Ultimate Non-Federal Share	$ 245,000

The project is not yet authorized for construction. The cost sharing for construction of the project will be in accordance with Section 103 of the Water Resources Development Act of 1986, as amended. The local sponsor will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary, in the construction of the project; provide 35 percent of the costs for ecosystem restoration purposes; provide 50 percent of the costs for recreation purposes; and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of all facilities. Fiscal Year 2004 funds would be used to initiate Preconstruction Engineering and Design Phase, and for detailed design of the project. Preconstruction Engineering and Design scheduled completion date is to be determined.

SUBTOTAL NEW PED-ENVIRONMENTAL	525,000	0	To Be Determined	350,000	To Be Determined

Study	Total Estimated Federal Cost $	Allocation Prior To FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional To Complete After FY 2004 $
b. Navigation: None.					
c. Flood Control: None.					
d. Shoreline Protection: None.					
e. Special Studies: None.					
SUBTOTAL NEW PED	525,000	0	To Be Determined	350,000	To Be Determined

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

4. PRECONSTRUCTION ENGINEERING AND DESIGN (PED) - CONTINUING

a. Environmental: None.

b. Navigation: The amount of $415,000 is requested for Fiscal Year 2004 to continue PED activities on one project, and to complete PED activities on one project.

Texas

Gulf Intracoastal Waterway - High Island to Brazos River	1,175,000	0	To Be Determined	315,000	To Be Determined

This reach of the Gulf Intracoastal Waterway (GIWW) includes approximately 43 miles of channels in Galveston and Brazoria Counties, from Rollover Pass at GIWW Mile 330 to West Bay at Mile 373. Commerce transported along this section of the GIWW totaled nearly 50 million tons in 1994, with petrochemicals as the major commodity shipped. An interim feasibility study, the GIWW – High Island to Brazos River Interim Feasibility Study, recommended several improvements to the waterway between Rollover Pass and West Bay. The recommended project includes a sediment basin at Rollover Pass, widening the channel area to 75 feet for a length of 1400 feet at Sievers Cove, widening the channel at the Texas City Wye, setting back existing mooring facilities by 80 feet at Pelican Island, protecting existing open channels from wave action at Greens Lake, and establishing a mooring basin at the West Bay washout.

The estimated cost for the recommended plan is $15,500,000. The average benefit to cost ratio is 2.16 to 1 based on the latest economic analysis dated December 2002. The GIWW is designated as part of the Inland Waterway System. Construction costs for inland navigation improvements will be cost shared 50-50 from the Inland Waterway Trust Fund. The State of Texas is the non-Federal sponsor of the GIWW and continues to maintain a high interest in the waterway because of their responsibility to provide dredged material disposal areas. The State's interest is evident through monthly meetings of the State-chaired Gulf Intracoastal Waterway Advisory Committee.

The project is not yet authorized for construction. Fiscal Year 2003 funds are being used to complete the interim feasibility study in April 2003, and to initiate design for the project. Fiscal Year 2004 funds will be used to complete design and initiate work on the first set of plans and specifications. The completion date for Preconstruction, Engineering and Design is being determined.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
Texas (continued)					
Gulf Intracoastal Waterway - Matagorda Bay	520,000	17,000	To Be Determined	100,000	To Be Determined

This reach of the Gulf Intracoastal Waterway (GIWW) extends from Channel Mile 454 to 473, a distance of about 19 miles. The GIWW leaves the landlocked portion on the eastern side of Matagorda Bay near Mile 454 and turns in a southwesterly direction before turning west and running parallel to Matagorda Peninsula. At Mile 471, the GIWW intersects with the deep-draft Matagorda Ship Channel (MSC). The GIWW enters the landlocked portion again at Port O'Connor near Mile 473. Historically, shoaling occurs at a rapid rate. Water depths in this area are naturally shallow and numerous oyster reefs characterize the area. The shoaling rate is probably the result of sediment movement by wind and tidal action between Matagorda Bay and West Matagorda Bay. At the reach between Mile 470 and Mile 472, where the GIWW intersects the MSC, dredging occurs almost annually, removing 200,000 - 300,000 cubic yards. The proximity of the GIWW to the natural pass of Pass Cavallo and the construction of the jettied entrance channel and deep-draft MSC has created hazardous navigation. The influences of the natural and man-made channels have created a dangerous crosscurrent at the intersection of the GIWW and MSC. To the south of the GIWW is Sundown Island, a National Audubon Society bird sanctuary. To the north is the dredged material placement site for the maintenance dredging operations. This has effectively limited the ability of barge traffic to maneuver to compensate for the crosscurrents and shoaling. Because of the various problems along this reach, the waterways industry has reported that numerous groundings have occurred and that vessels operate under reduced speeds to compensate for these problems. The industry is concerned about the continuing safety problems associated with this reach. As a result, industry has self-imposed one-way traffic in this reach.

The recommended plan consists of realigning the navigation channel from mile 460 to mile 472, with a channel approximately 6000 feet north of and paralleling the existing route. Channel dimensions are 12 feet deep by 125 feet wide for most of the channel, with a widening to 300 feet where it crosses the Matagorda Ship Channel, and flares at each of the places where the channel changes direction. Material dredged from the channel will be used to create marshes in Matagorda Bay and to combat erosion along Matagorda Peninsula. The existing channel from mile 460 to mile 473 would be abandoned. The construction cost is estimated to be $15,370,000. The benefit to cost ratio is 1.4. The GIWW has been designated as part of the inland waterways and therefore it has been recommended that the project be cost shared 50/50 with the Inland Waterways Trust Fund. The project is proposed to be constructed under the authority of Section 201 of the Flood Control Act of 1965. Fiscal Year 2003 funds are being used to continue the Preconstruction Engineering and Design phase of the project and prepare plans and specifications. Fiscal Year 2004 funds will be used to complete plans and specifications. Preconstruction, Engineering and Design is scheduled to be completed in September 2004.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$
SUBTOTAL CONTINUING NAVIGATION	1,695,000	17,000	To Be Determined	415,000	To Be Determined

c. Flood Control: The amount of $774,000 is requested for Fiscal Year 2004 to complete PED activities on one project.

Texas

Greens Bayou, Houston	8,160,000	7,260,000	To Be Determined	774,000	To Be Determined

Greens Bayou, excluding its tributary of Halls Bayou, drains about 154 square miles in the north central area of the Buffalo Bayou watershed. The area is subject to rainstorms throughout the year and urban flooding is a common occurrence. About 10,967 homes and businesses are currently subject to flooding by the Standard Project Flood (SPF), and about 7,100 of these properties would be subject to flooding by a 100-year frequency flood. On an average annual basis, stream flooding could cause about $17,800,000 in damages per year to existing properties. Greens Bayou is one feature of a comprehensive flood control plan for the Buffalo Bayou watershed, which has six separate elements providing flood control on Carpenters, Greens, Halls, Hunting, Little White Oak, and Brays Bayous. The authorized plan features for Greens Bayou include 25 miles of channel improvements, 14 miles of selective clearing, acquisition of flood-prone properties, and 4 flood detention basins. The proposed project would provide about 25-year flood protection, and would reduce average annual damages by 91.2 percent. Aesthetic vegetation would be included to improve environmental quality, and mitigation would be required to compensate for the loss of 48 acres of riparian fish and wildlife habitat, and for 194 acres of upland forest wildlife habitat. Recreation features incorporated into the plan include trails, picnic facilities, sports fields, canoe launching ramps, comfort stations and parking areas. The total first cost of the recommended plan, based on October 2000 price levels, is estimated at $274,120,000, with a Federal cost of $171,294,000 and a non-Federal cost of $102,826,000. The average annual benefits are estimated at $61,722,100 for flood control, and $1,901,800 for recreation. The benefit-cost ratio is 4.8 to 1 based upon the latest economic analysis dated August 1993 with cost updated to October 2000. The local sponsor, Harris County Flood Control District, does not support the authorized plan due to the extensive mitigation requirements and heightened sensitivity to environmental needs. A reevaluation of the project scope was requested to formulate a smaller project with reduced environmental impacts. The new plan recommended consists of 3.2 miles of channel improvement in the upper reaches of the watershed, a detention basin at the downstream terminus of the channel improvements, and a buyout of flood-prone structures in the residual floodplain. The structural flood damage reduction features are estimated to provide a ten-year level of protection, at a cost of approximately $26.5 million. The local sponsor for the project is the Harris County Flood Control District (HCFCD), a certified agent of the Harris County Commissioners Court in Texas. The HCFCD is a willing and viable local sponsor, and the cost sharing partner on three major flood control projects, Brays Bayou, Clear Creek, and Sims Bayou, Texas, which are currently under construction.

Study	Total Estimated Federal Cost	Allocation Prior To FY 2003	Allocation FY 2003	Tentative Allocation FY 2004	Additional To Complete After FY 2004
	$	$	$	$	$

Texas (continued)

Greens Bayou, Houston (continued)

The Water Resources Development Act of 1990 authorizes this project for construction. The cost sharing for construction of the project will be in accordance with Section 103 of the Water Resources Development Act of 1986, as amended. Local interests will be required to provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas, modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities necessary in the construction of the project; pay five percent of the costs allocated to structural flood control in cash during the period of construction; contribute an additional amount in cash or credits to bring the total non-federal share of costs allocated to structural flood control to a minimum of 25 percent; pay twenty-five percent of the costs allocated to non-structural flood control; pay fifty percent of the costs allocated to construction of the recreation facilities, and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the structural flood control and recreation facilities.

Fiscal Year 2003 funds are being used to continue studies on the General Reevaluation Report. Fiscal Year 2004 funds will be used to complete the General Reevaluation Report and initiate design. The completion date for Preconstruction, Engineering and Design phase is being determined.

SUBTOTAL CONTINUING FLOOD CONTROL	8,160,000	7,260,000	To Be Determined	774,000	To Be Determined

Study	Total Estimated Federal Cost $	Allocation Prior To FY 2003 $	Allocation FY 2003 $	Tentative Allocation FY 2004 $	Additional To Complete After FY 2004 $
d. Shoreline Protection: None.					
e. Multiple Purpose: None.					
TOTAL PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) CONTINUING	9,855,000	7,277,000	To Be Determined	1,189,000	To Be Determined
TOTAL PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED)	10,380,000	7,277,000	To Be Determined	1,539,000	To Be Determined
GRAND TOTAL - SURVEYS AND PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES	106,793,000	35,910,000	To Be Determined	7,900,000	To Be Determined

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Channel to Victoria, TX (Continuing)

LOCATION: The project is located in south central Texas within Calhoun and Victoria Counties. The channel extends approximately 35 miles from the Gulf Intracoastal Waterway in San Antonio Bay to a turning basin located approximately seven miles south of the City of Victoria.

DESCRIPTION: The existing 9-foot by 100-foot Channel to Victoria is a tributary channel to the Gulf Intracoastal Waterway (GIWW). The project, authorized by the Water Resources Development Act of 1988, consists of enlarging the 35-mile shallow-draft navigation channel to 12 feet by 125 feet from the GIWW in San Antonio Bay to a 500-foot by 800-foot turning basin near the City of Victoria. The 2.3 million cubic yards of material dredged from the 10-mile bay reach was deposited in two upland disposal areas, one 340 acres in size and the other 265 acres; the 4.3 million cubic yards of material dredged from the landlocked reach will be placed in disposal areas adjacent to the channel. The project also includes upgrading the fender systems at the Highway 35 bridge and the Missouri Pacific Railroad bridge and construction of two weir structures in the vicinity of Green Lake. The local sponsors for the project are the Victoria County Navigation District and the West Side Calhoun County Navigation District.

AUTHORIZATION: Water Resources Development Act of 1988.

REMAINING BENEFIT-REMAINING COST RATIO: 9.4 to 1 at 8 3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.7 to 1 at 8 3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 8 3/4 percent (FY 1993)

BASIS OF BENEFIT-COST RATIO: Benefits are based on Reevaluation Report approved at Southwestern Division January 1990, costs as included in the Project Design Memorandum approved by Southwestern Division October 1991, as amended and updated to October 1994 price levels. Benefits were reaffirmed in a Limited Reevaluation Report approved at the ASA (CW) on 18 October 1994.

SUMMARIZED FINANCIAL DATA		
Estimated Federal Cost (CoE)		$31,686,000
Scheduled Construction		
Estimated Federal Cost (DoT)		422,000
Scheduled Construction		
Estimated Federal Cost (USCG)		62,000
Scheduled Construction		
Estimated Total Federal Cost		$32,170,000
Estimated Non-Federal Cost		$ 6,530,000
Scheduled Construction	$6,530,000	
Cash Contribution	$3,521,000	
Other Costs	$3,009,000	
Total Estimated Scheduled Construction Cost		$38,700,000
Total Estimated Project Cost		38,700,000
Allocations to 30 September 2002		28,720,000
Conference Allowance for FY 2003		To be determined.
Allocation for FY 2003		To be determined.
Allocations through FY 2003		To be determined.
Allocation Requested for FY 2004		2,966,000
Programmed Balance to Complete		0
Unprogrammed Balance to Complete after FY 2004		0

ACCUM. PCT. OF EST FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project		85	Sep 04

PHYSICAL DATA

Channels:
Shallow Draft Channel 12′ x 125′ x 35 miles long
Upland Disposal Areas:
13 disposal areas with total acreage of 1,930

JUSTIFICATION: The existing channel is 9 feet deep by 100 feet wide. The channel primarily serves several sand and gravel shippers, and petrochemical plants along the waterway. The waterway currently carries approximately 3.4 million tons per year, and projections indicate that commerce will increase in the future. The proposed plan would create a safer channel for the increased future traffic and increase future development potential along the channel. The additional channel depth will accommodate barge traffic using the Gulf Intracoastal Waterway without light loading or trans-shipment. The average annual benefits are $5,586,700, all commercial navigation, based on October 1994 price levels.

FISCAL YEAR 2004: The requested amount of $2,966,000 will be applied as follows:

Complete resolution of archeological site	$2,700,000
Federal Review of Land Acquisition and Relocations	6,000
Planning, Engineering, and Design	110,000
Construction Management	150,000
Total	$2,966,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments during Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way.	$3,009,000	$67,000
Pay 10 percent of the costs allocated to shallow draft navigation, dredged material disposal areas, and mitigation during construction.	3,521,000	
Total Non-Federal Costs	$6,530,000	$67,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction. The local sponsor's share of the cost is being financed primarily from the sale of general obligation bonds. A bond issue was passed by voters, 65 percent for and 35 percent against, on 2 October 1993 to finance Victoria County's share of construction costs. The general obligation bonds were sold on 8 March 1994.

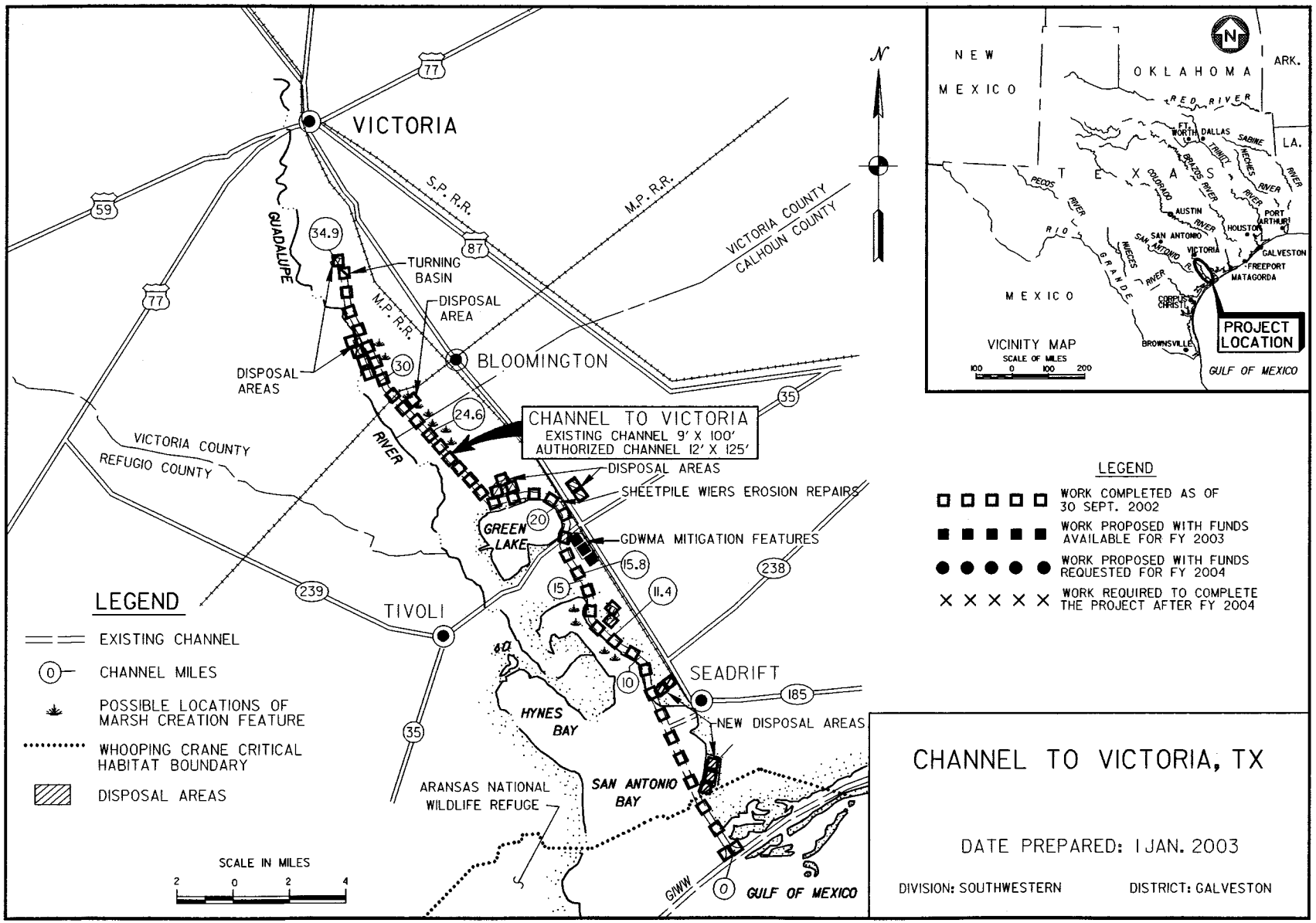
STATUS OF LOCAL COOPERATION: In a Letter of Assurance dated 16 April 1987, the Victoria County Navigation District agreed to cost-share in the project in accordance with the Water Resources Development Act of 1988. A Project Cooperation Agreement (PCA) was executed in November 1994. An amendment to the PCA, which was developed to incorporate new cost-sharing provisions for construction of disposal facilities of Water Resources and Development Act of 1996, was executed 14 December 1997.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate ($31,686,000) is an increase of $3,295,000 from the latest estimate of $28,391,000 presented to Congress (FY 2002). This change includes the following items.

Item	Amount
Post Contract Award and Other Estimating Adjustments	$3,152,000
Price Escalation on Construction Features	$ 143,000
Total	$3,295,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with Environmental Protection Agency on 15 August 1986. An Environmental Assessment was completed for the new project disposal areas, 20 September 1991.

OTHER INFORMATION: Funds were appropriated to initiate preconstruction engineering and design in Fiscal Year 1989 and funds to initiate construction were appropriated in Fiscal Year 1993.


VICTORIA
BLOOMINGTON
TIVOLI
SEADRIFT
GUADALUPE
RIVER
TURNING BASIN
DISPOSAL AREA
DISPOSAL AREAS
M.P.R.R.
S.P.R.R.
VICTORIA COUNTY
CALHOUN COUNTY
VICTORIA COUNTY
REFUGIO COUNTY
CHANNEL TO VICTORIA
EXISTING CHANNEL 9' X 100'
AUTHORIZED CHANNEL 12' X 125'
DISPOSAL AREAS
SHEETPILE WIERS EROSION REPAIRS
GDWMA MITIGATION FEATURES
NEW DISPOSAL AREAS
GREEN LAKE
HYNES BAY
SAN ANTONIO BAY
ARANSAS NATIONAL WILDLIFE REFUGE
GIWW
GULF OF MEXICO
34.9
30
24.6
20
15.8
15
11.4
10
6.0
0
77
59
87
35
239
238
185
LEGEND
EXISTING CHANNEL
CHANNEL MILES
POSSIBLE LOCATIONS OF MARSH CREATION FEATURE
WHOOPING CRANE CRITICAL HABITAT BOUNDARY
DISPOSAL AREAS
SCALE IN MILES
2 0 2 4
N
NEW MEXICO
OKLAHOMA
ARK.
LA.
TEXAS
MEXICO
RED RIVER
SABINE RIVER
TRINITY RIVER
BRAZOS RIVER
COLORADO RIVER
PECOS RIVER
RIO GRANDE
AUSTIN
HOUSTON
PORT ARTHUR
SAN ANTONIO
VICTORIA
GALVESTON
FREEPORT
MATAGORDA
CORPUS CHRISTI
BROWNSVILLE
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP
SCALE OF MILES
100 0 100 200
LEGEND
WORK COMPLETED AS OF 30 SEPT. 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2004
CHANNEL TO VICTORIA, TX
DATE PREPARED: 1 JAN. 2003
DIVISION: SOUTHWESTERN
DISTRICT: GALVESTON

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Houston-Galveston Navigation Channels, TX (Continuing)

LOCATION: The project is located in the Galveston Bay system in Harris and Galveston Counties, Texas.

DESCRIPTION: The total project provides for a 45-foot project by enlarging the Houston Ship Channel to a depth of 45 feet and a width of 530 feet, and the Galveston Channel to a depth of 45 feet over a width which varies between 650 and 1112 feet, and deepening the entrance channel to the Galveston Harbor and Channel to 47 feet over its original 800-foot width and 10.5 mile length, and extending the channel an additional 3.9 miles to the 47-foot bottom contour in the Gulf of Mexico along the existing alignment. Dredged material from the bay will be used for construction of environmental restoration sites to include 4,250 acres of marsh, and 6 acres of bird island. Also, approximately 118 acres of oyster cultch will be placed to provide substrate for oysters to grow.

AUTHORIZATION: Water Resources Development Act (WRDA) of 1996. Energy and Water Development Appropriations Act, 2001, as enacted by Section 1(a)(2) of P.L. 106-377 (Barge lanes).

REMAINING BENEFIT-COST RATIO: 4.0 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 7 5/8 percent. (Authorized Project)

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 7 5/8 percent. (FY 1996)

BASIS OF BENEFIT-COST RATIO: Benefits and costs are from the Limited Reevaluation Report and Supplemental Environmental Statement approved by HQUSACE in May 1996.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)		533,770,000		Entire Project	70	To be determined.
Programmed Construction	533,770,000					
Unprogrammed Construction	0					
Estimated Appropriation Requirement(OFA)		4,064,000				
Programmed Construction	4,064,000					
Unprogrammed Construction	0					
Estimated Appropriation Requirement		537,834,000				
Programmed Construction	537,834,000					
Unprogrammed Construction	0					
Future Non-Federal Reimbursement		31,925,000				
Programmed Construction	31,925,000					
Unprogrammed Construction	0					
Estimated Federal Cost (Ultimate) (CoE)		505,909,000				
Programmed Construction	505,909,000					
Unprogrammed Construction	0					
Estimated Non-Federal Cost		181,256,000				
Programmed Construction	181,256,000					
Cash Contributions	148,150,000					
Other Costs:						
Berthing Facilities	9,609,000					
Lands and Relocations	1,099,000					
Credit	22,398,000					
Unprogrammed Construction	0					
Cash Contributions	0					
Other Costs	0					
Total Estimated Programmed Construction Cost		719,090,000				
Total Estimated Unprogrammed Construction Cost		0				
Total Estimated Project Cost		719,090,000				

PHYSICAL DATA - Total Project

Channels:
- Houston Ship Channel – 39.2 miles
- Galveston Channel – 3.8 miles
- Galveston Harbor Channel – 14.4 miles
- Barge Lanes – 26 miles

Beneficial use of Dredged Material
- Oyster Cultch – 118 acres
- Marsh – 4,250 acres
- Bird Island – 6 acres
- Offshore Underwater Berm
- Redfish Island – 4 acres

Division: Southwestern **District: Galveston** **Project: Houston-Galveston Navigation Channels, Texas**

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Allocations to 30 September 2002	$ 171,361,000				
Conference Allowance for FY 2003	To be determined.				
Allocation for FY 2003	To be determined.				
Allocations through FY 2003	To be determined.				
Allocation Requested for FY 2004	18,726,000				
Programmed Balance to Complete after FY 2004	To be determined. 1/				
Unprogrammed Balance to Complete after FY 2004	0				

1/ Will include $189,531,000 for deferred construction of environmental restoration sites.

JUSTIFICATION: The total project will include environmental restoration and will provide transportation savings from using larger or more efficient vessels, reduction in vessel casualties, and reduction of vessel delays. The average annual benefits for the Houston-Galveston project are $87,300,000, all commercial navigation, based on October 1994 price levels.

Annual Benefits	**Amount**
Navigation	$ 87,300,000
Total	$ 87,300,000

FISCAL YEAR 2004: Funds in the amount of $18,726,000 will be used in FY 04 as follows:

Continue Construction	$17,200,000
Federal Review of Land Acquisition	5,000
Cultural Resources	300,000
Planning, Engineering, and Design	326,000
Construction Management	895,000
Total	$18,726,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$ 1,041,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	58,000	
Local service facilities necessary to realize benefits of the general navigation features	9,609,000	
Pay a percentage of the costs allocated to navigation improvements, to mitigate the project's adverse environmental impacts, and to pay a portion of the cost of operation, maintenance, and replacement of the project.	170,548,000	$604,000
General Navigation Features - Deep Draft $72,934,000		
General Navigation Features - Shallow Draft 3,688,000		
Environmental Restoration 30,749,000		
Environmental Restoration - Deferred Const. 63,177,000		
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 year following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations, and dredged or excavated material disposal areas provided for navigation.	31,925,000	
Total Non-Federal Costs	$213,181,000	$604,000

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement with the Port of Houston Authority was executed on 10 June 1998. Houston and Harris County voters approved a $130 million Port of Houston bond issued on 7 November 1989, by a 63 percent to 37 percent margin. The City of Galveston expressed their support for the total project by letters

dated January 1987 and 30 October 1995. The Project Cooperation Agreement with the Port of Galveston has been tentatively scheduled for April 2004.

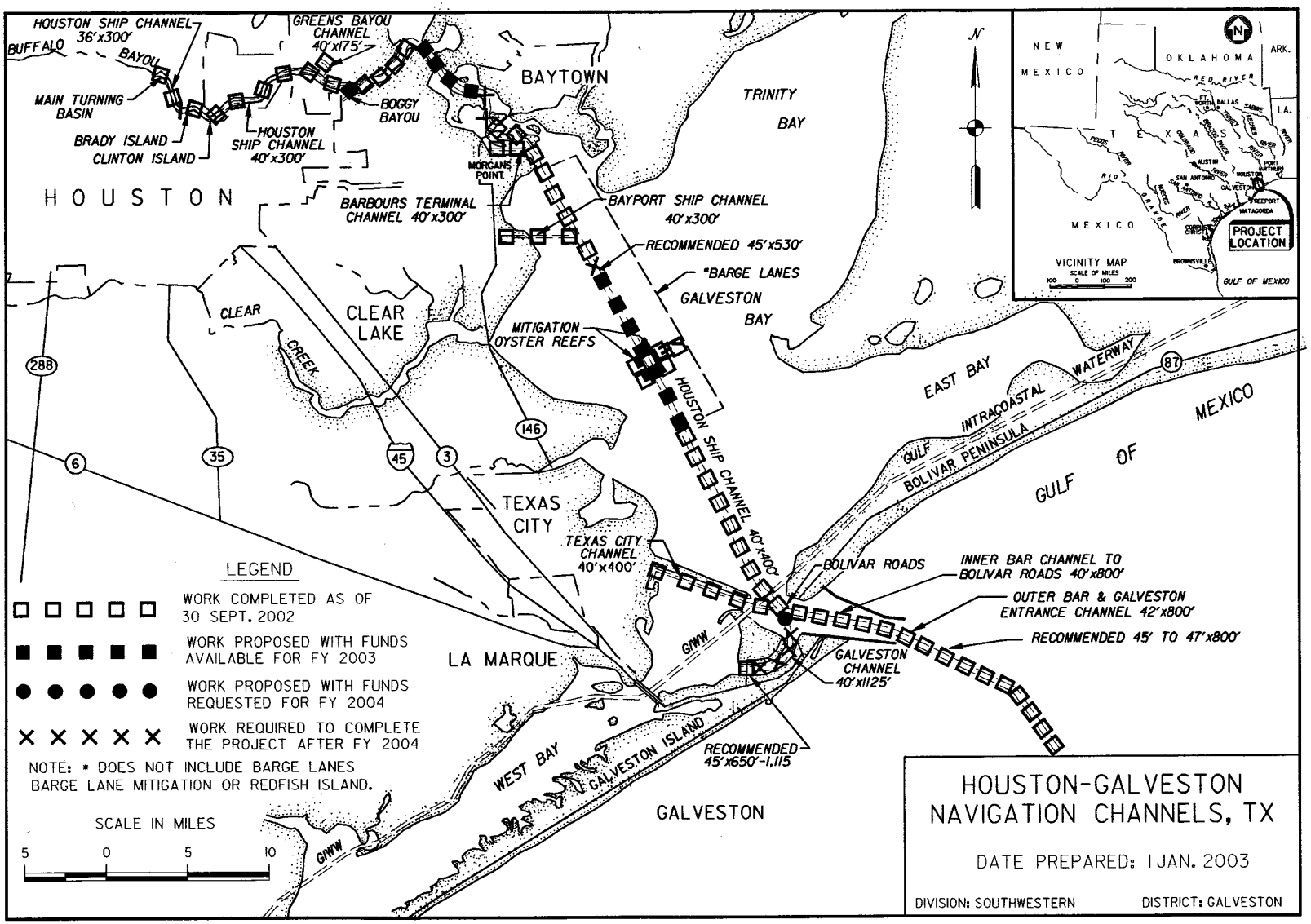
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $533,770,000 is an increase of $23,398,000 from the latest estimate ($510,372,000) presented to Congress (FY 2003). This change includes the following items.

Item	Amount
Post Contract Award and Other Estimating Adjustments	$ 17,045,000
Price Escalation on Construction Features	6,353,000
Total	$ 23,398,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (FEIS) was filed with the Environmental Protection Agency in 25 November 1988. A supplement to the FEIS has been prepared and was listed in the Federal Register on 24 November 1995.

OTHER INFORMATION: The total project as authorized by WRDA 96 included channel deepening of the Galveston Entrance Channel, Galveston Harbor and Channel and the Houston Ship Channel to Boggy Bayou in Houston, Texas.

Funds to initiate preconstruction planning were appropriated in Fiscal Year 1990. Funds to initiate construction were appropriated in Fiscal Year 1998.



Division: Southwestern **District:** Galveston **Project:** Houston-Galveston Navigation Channels, Texas

APPROPRIATION TITLE: Construction General - Navigation/Mitigation

PROJECT: Neches River Saltwater Barrier, Texas (Continuing)

LOCATION: The project is located on the Neches River in Jefferson and Orange Counties, Texas, about 7 miles north of the I-10 bridge and just south of the Big Thicket National Preserve at Beaumont, Texas.

DESCRIPTION: The project provides for a tainter-gated saltwater barrier structure, a sector-gated navigation bypass channel, and an access road and levee.

AUTHORIZATION: Water Resources Development Act (WRDA) of 1976.

REMAINING BENEFIT-REMAINING COST RATIO 21.0 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 4.88 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 4.88 to 1 at 7 1/8 percent (FY 2000).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Revaluation Report dated Dec 97 at Oct 1997 price levels.

SUMMARIZED FINANCIAL DATA	ACCUM PCT. OF EST. FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
		Entire Project	85	Sep 04

Estimated Federal Cost		$ 43,080,000
Estimated Non-Federal Cost		14,360,000
Cash Contribution	$8,430,000	
Other Costs	$5,930,000	
Total Estimated Project Cost		$ 57,440,000

Allocations to 30 September 2002	$32,441,000
Conference Allowance for FY 2003	To be determined
Allocation for FY 2003	To be determined
Allocations through FY 2003	To be determined
Allocation Requested for FY 2004	4,108,000
Programmed Balance to Complete after FY 2004	0
Unprogrammed Balance to Complete after FY 2004	0

PHYSICAL DATA

Overflow Dam:
Neches River – at river mile 23
Relocations:
Utilities
Roads
Lands & Damages:
Acquisitions, Condemnations, Appraisals
Tainter Gate Structure:
Clearing, Excavation, etc.

JUSTIFICATION: Annually, the fresh water supply sources to the City of Beaumont and the Lower Neches Valley Authority (LNVA) are threatened by salt water intruding up the Neches River during periods of low river flow and high withdrawal rates by the water supply users. The Sabine - Neches Waterway project, constructed at 100 percent Federal costs, contributes to 75 percent of the saltwater intrusion. Upstream water supply withdrawals contribute to 25 percent of the saltwater intrusion. To avoid damages, the LNVA constructs temporary saltwater barriers in the Neches River and Pine Island Bayou. Although effective and economical, these barriers interfere with navigational and recreational use. However, these temporary barriers are unacceptable for environmental and navigation reasons as a long-term solution to the problem of salinity intrusion. This project will mitigate the saltwater intrusion impacts resulting from the Federal deepening of the Sabine - Neches Waterway. There are 26 industries in the Beaumont-Port Arthur area which use about 40 percent of the LNVA water (approximately 41 billion gallons annually). The type of industries range from refining petrochemical to tire and rubber, and raw products for resin. The industrial sector is entirely dependent on LNVA, and cannot accept water with more chloride than 150 parts per million (ppm) for processing, and 250 ppm for cooling. Additionally, high quality water is required for resin production. The area produces about 70 percent of resins (used for plastics) made in the United States.

Annual Benefits	**Amount**
Fish & Wildlife	$ 7,086,000
Other (Agricultural, Industrial, Municipal)	15,561,000
Total	$22,647,000

FISCAL YEAR 2004: The requested amount of $4,108,000 will be applied as follows:

Complete Construction	$ 3,645,000
Federal Review of Land Acquisition and Relocations	5,000
E&D During Construction	50,000
Construction Management	408,000
Total	$ 4,108,000

NON-FEDERAL COST: By letter dated 9 May 1997,the Assistant Secretary of the Army (Civil Works) approved the project plan be cost shared at 75/25 as a navigation mitigation project to mitigate for the adverse impacts the Sabine-Neches Waterway has had on area water supplies by contributing to salt water intrusion. The Assistant Secretary of the Army (Civil Works) also approved a 75/25 cost sharing for the Operations, Maintenance Repairs, Rehabilitation , and Replacement Costs in a letter dated October 27, 1999. The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way necessary for Construction	$ 1,810,000	
Relocations determined to be necessary for implementation of the project	$ 4,120,000	
Cash payment during the period of construction	$ 2,100,000	
Voluntarily contribute additional cash during the period of construction to make the non-Federal contribution equal to 25% of the total project first cost	$ 6,330,000	
Operation, Maintenance, Repair, Replacement & Rehabilitation		$202,000
Total	$14,360,000	$202,000

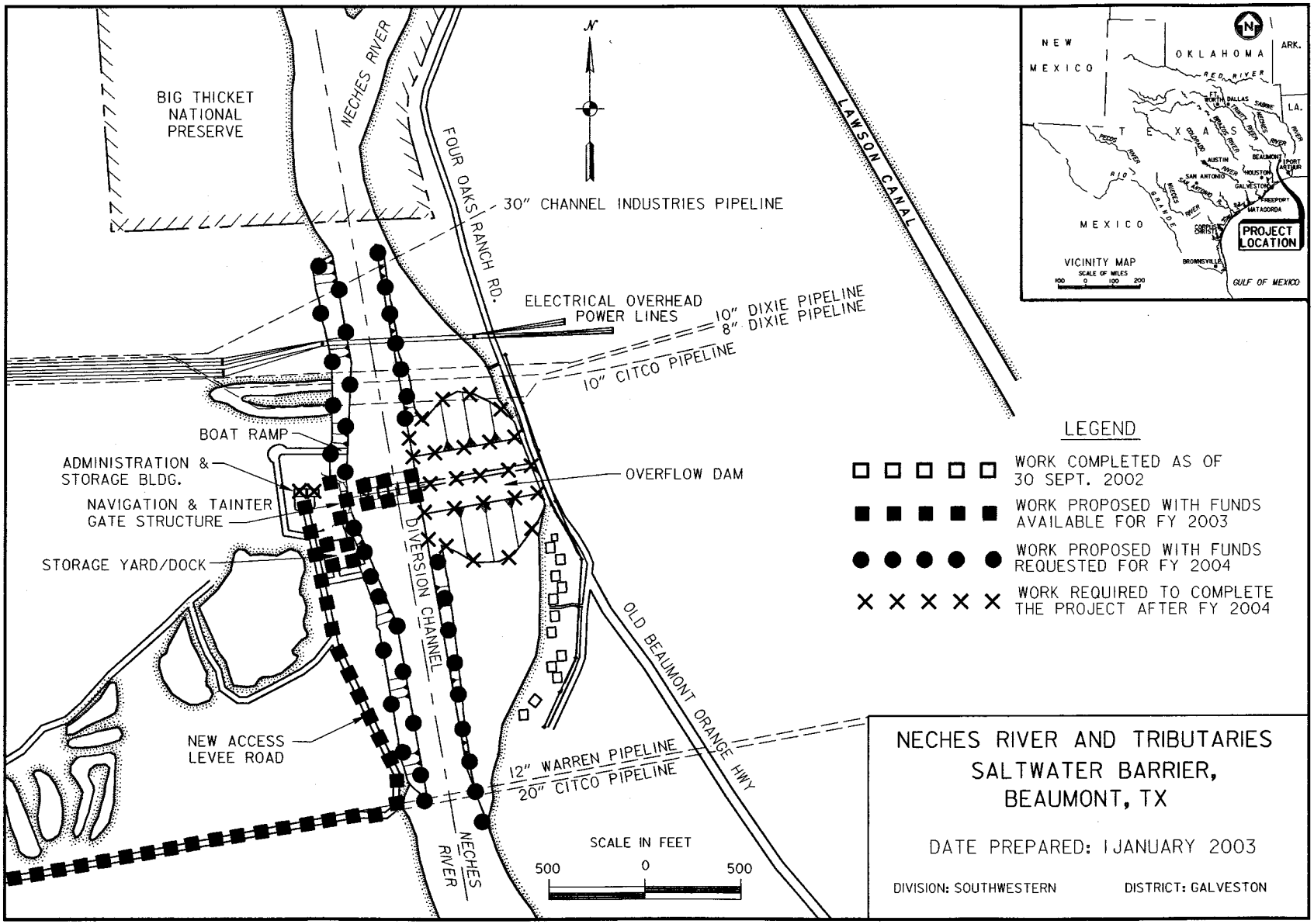
STATUS OF LOCAL COOPERATION: The sponsor for the navigation/mitigation project is Lower Neches Valley Authority (LNVA). The current non-Federal cost estimate of $14,310,000 for navigation/mitigation, includes a cash contribution of $8,470,000. In a letter dated September 20, 1991, the local sponsor expressed a renewed interest in the project. The Corps of Engineers requested a letter of assurance from the local sponsor and that letter was furnished on January 5, 1994. The letter confirmed the local sponsor's awareness of the WRDA 86 cost-sharing provisions, provided assurance of project support and ability to financially support the project, and recommended expeditious undertaking of the project reevaluation. The Sponsor's latest letter expressing their continued support is dated August 20, 1998. The Project Cooperation Agreement was executed May 22, 2000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $43,080,000 is an increase of $150,000 from the latest estimate ($42,930,000) presented to Congress (FY 2003). This change includes the following items:

ITEMS	AMOUNT
Price Escalation on Construction Features	+ 150,000
Total	+ 150,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A supplement to the Final Environmental Impact Statement was prepared as part of the phase I GDM dated July 1981. The draft Environmental Assessment contained in the General Reevaluation Report, completed in December 1997, concluded that the recommended plan would not have a significant adverse environmental effect on the quality of the environment. The final Environmental Assessment was completed in October 1998.

OTHER INFORMATION: The project, as authorized by the Water Resources Development Act of 1976, limited the local sponsor's share of the total project cost to $2,100,000. By memorandum dated 9 May 1997, the Assistant Secretary of the Army (Civil Works) concluded that the project be cost shared as a navigation mitigation project to mitigate for the adverse impacts the Sabine-Neches Waterway has had on area water supplies by contributing to saltwater intrusion. The authorizing documents found that the Sabine-Neches Waterway project, constructed at 100 percent Federal costs, caused 75 percent of the saltwater intrusion, and that 25 percent of the problem resulted from upstream withdrawals. On this basis, the Chief of Engineers Report recommended a Federal cost of 75 percent, and a non-Federal cost of 25 percent. The local sponsor has agreed to voluntarily contribute funds, under the authority of Section 4 of the River and Harbors Act of 1915, in excess of the $2,100,000 to make the non-Federal share of project costs equal to 25 percent of total project costs.



Division: Southwestern **District: Galveston** **Project: Neches River Saltwater Barrier, Texas**

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: McClellan-Kerr Arkansas River Navigation System, Locks and Dams, AR and OK (Continuing)
(Excluding Montgomery Point Lock and Dam)

LOCATION: The project is located in 15 counties in Arkansas and six counties in Oklahoma. The project begins at the confluence of the Mississippi and White Rivers and follows the White River and the Arkansas Post Canal a distance of 19 miles to the Arkansas River; thence up the Arkansas River 374 miles to the mouth of the Verdigris River; and thence up the Verdigris River to Catoosa, Oklahoma, a distance of 50 miles.

DESCRIPTION: The authorized project provides for the improvement of the Arkansas River and its tributaries by the construction of dams and channels to serve navigation, afford additional flood control, produce hydroelectric power, and provide related benefits, such as recreation and wildlife propagation. The navigation feature of the project consists of a 9-foot navigation channel from the Mississippi River to Catoosa, Oklahoma, 15 miles east of Tulsa.

AUTHORIZATION: River and Harbor Act of 1946, Water Resources Development Acts of 1974, 1986, and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is not applicable because the project is nearing completion.

TOTAL BENEFIT-COST RATIO: See above.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 2-1/2 percent (FY 1963).

BASIS OF BENEFIT-COST RATIO: Benefits are from evaluation approved in July 1968 at 1968 price levels.

SUMMARIZED FINANCIAL DATA		**ACCUM PCT OF EST FED COST** (CofE Only)	**STATUS (1 Jan 2003)**	**PCT CMPL**	**PHYSICAL COMPLETION SCHEDULE**
Estimated Federal Cost (CoE)	$669,000,000		Entire Project	93	To be determined
Estimated Federal Cost (USCG)	2,268,000				
Estimated Non-Federal Cost	0				
Total Estimated Project Cost	$671,268,000				

SUMMARIZED FINANCIAL DATA (CONTINUED)

		ACCUM PCT OF EST FED COST
Allocations to 30 September 2002	620,107,000	93
Conference Allowance for FY 2003	To be determined.	
Allocation for FY 2003	To be determined.	
Allocations through FY 2003	To be determined.	
Allocation Requested for FY 2004	3,300,000	
Programmed Balance to Complete	To be determined.	
Unprogrammed Balance to Complete after FY 2004	0	

PHYSICAL DATA

Channels: White River - 9.8 mi, 300' wide, mi 9.8 to 0.0

Verdigris River - 50.3 mi, 150' wide (1965 survey)

Arkansas Post Canal - 9.2 mi, 300' wide, mi 19.0 to 9.8

Arkansas River - 374 mi, 250' wide, mi 460.2 1940 survey) to 41.6 (1943 survey)

All navigation channels were excavated to an initial depth of 12' or more below normal pool level.

Locks: Type - Single Chamber, single lift with miter Gates

Size - 110' X 600'

Normal (maximum) Lift - Varies from 14' for Lock No. 4 to 30' for Lock No. 1.

Number of Locks and Dams - 11 on Arkansas River and canal, 2 on Verdigris River.

Dams: Movable nonnavigable type with low sills, piers, tainter gates, abutments, and overflow embankments where required.

Lands and Damages:

Acres: 126,501 Type: Predominately agricultural Improvements: Typical farm units

PHYSICAL DATA (CONT'D)

Relocations:

Roads:	18 miles	$45,280,000 (Includes replacing 9 bridges, alter 3 bridges, and abandon 1 bridge.)			
Railroads:	7 miles	$40,436,000 (Includes replacing 2 bridges, alter 6 bridges, and abandon 1 bridge.)			
Cemeteries, Utilities, and Structures:		$30,016,000	Entrance Channel		
(Conway Water Supply)		($21,324,000)	Levee: 3 miles		$13,932,000

JUSTIFICATION: The McClellan-Kerr Arkansas River Navigation System was conceived and authorized as an overall plan made up of a group of interrelated elements consisting of lakes, multiple-purpose structures, navigation structures, and bank stabilization works, all designed on a coordinated basis to provide for development of optimum benefits. In Oklahoma, construction of Keystone and Eufaula Lakes, Robert S. Kerr Lock and Dam, Webber Falls Lock and Dam and the initial and second phase of Oologah Lake are complete, as is construction of Dardanelle Lock and Dam and the Ozark-Jeta Taylor Lock and Dam in Arkansas and construction of bank stabilization and channel rectification between the Robert S. Kerr Dam in Oklahoma and the mouth. The project opened for navigation from the Mississippi River to the Port of Tulsa at Catoosa, Oklahoma in 1970. Completion of the navigation route was a significant benefit to the economy of the surrounding area. In 2002, an estimated 12,300,000 tons of cargo were moved on the navigation system. Of this traffic, 3,500,000 tons were inbound; 5,400,000 tons were outbound, 3,000,000 tons were moved internally; and 400,000 tons were through traffic. These movements included such commodities as rock, grain, iron and steel, chemicals, chemical fertilizers, coal, petroleum products, and sand and gravel. The average annual benefits, based on July 1968 price levels, are as follows:

Annual Benefits	Amount
Navigation	$40,470,000
Power	14,838,900
Channel Stabilization	6,575,000
Flood Control	6,602,600
Water Supply	828,900
Fish and Wildlife	312,000
Recreation	2,297,000
Area Redevelopment	3,355,800
Total	$75,280,200

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Land Acquisition	$3,100,000
Planning, Engineering and Design	200,000
Total	$3,300,000

NON-FEDERAL COST: Local interests are required to provide adequate terminal and transfer facilities for navigation and bear the increased cost of maintenance and operation of all altered rail and highway routes, including bridges and appurtenances and utilities and other existing improvements, other than federally owned.

STATUS OF LOCAL COOPERATION: Prior to authorization of the project, local interests furnished written assurances that they would construct suitable public terminals. The requirements relative to increased cost of maintenance and operation of altered facilities apply to the owners of these facilities and were covered during negotiations of relocations contracts for the alteration of the various facilities.

Laws enacted in 1959 by the States of Arkansas and Oklahoma authorized the organization and operation of port authorities and permitted political subdivisions to engage in port activities. Port authorities have been organized to develop facilities in Oklahoma for the Tulsa-Rogers counties and the city of Muskogee and these ports are in operation.

In the State of Arkansas, port authorities have been organized to develop public port and harbor facilities at Fort Smith, Van Buren, Clarksville, Dardanelle-Russellville, Morrilton, Little Rock, North Little Rock, Ozark, and Pine Bluff-Jefferson County Area. The Clarksville Port Authority has acquired a 28-acre tract of land for the development of its port facility. The Fort Smith, Little Rock, and Pine Bluff-Jefferson County Ports are in operation.

In addition to the public ports discussed above, 71 companies have developed private port facilities along the navigation route in the State of Arkansas.

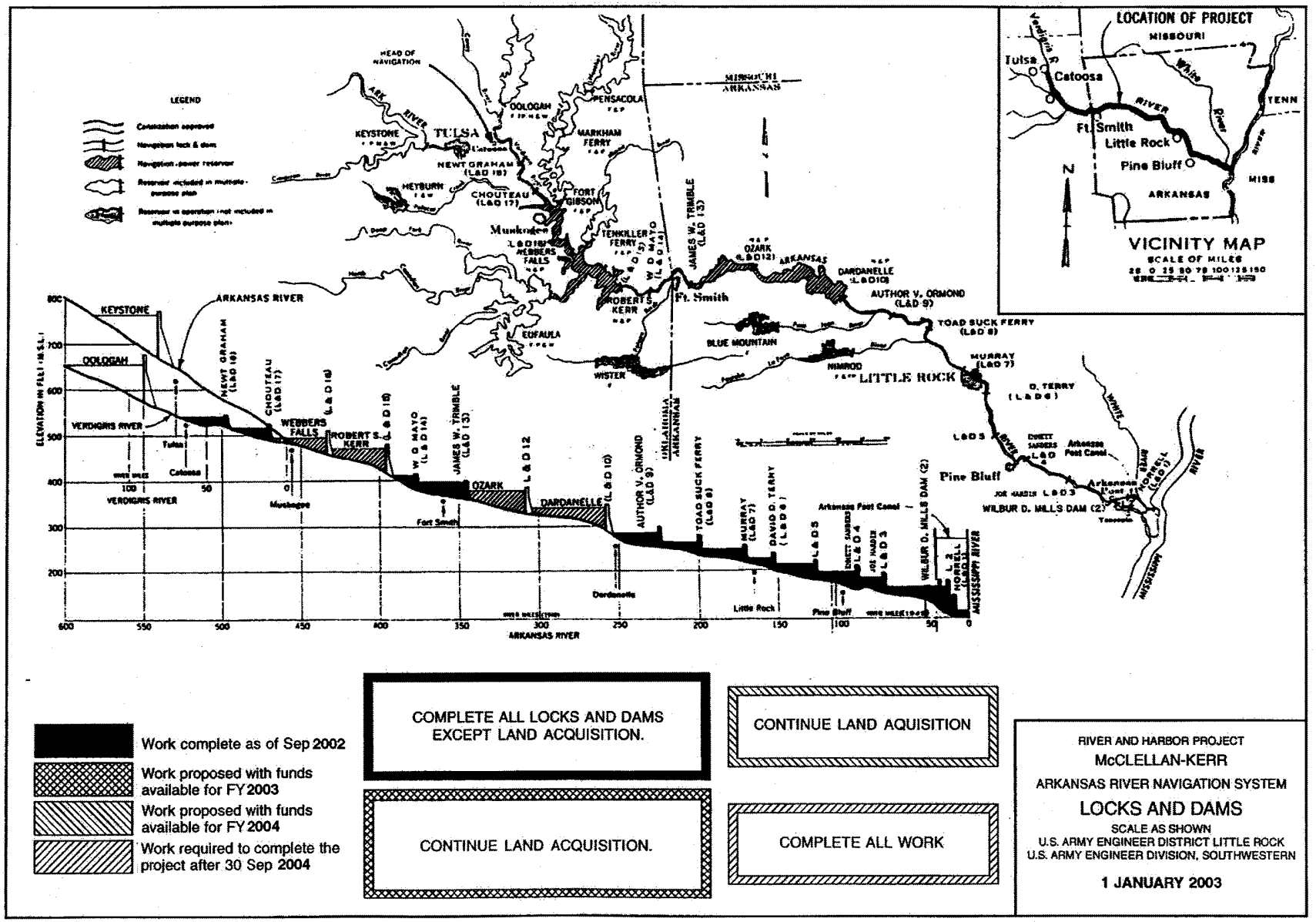
There are no other cost sharing or repayment requirements applicable to the project.

COMPARISON OF FEDERAL (CORPS OF ENGINEERS) COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $669,000,000 is an increase of $18,000,000 from the latest estimate ($651,000,000) submitted to Congress (FY2003). The change in total estimate includes the following items.

Item	Amount
Price escalation—Construction	$ 3,646,000
Authorized modifications	12,106,000
Price escalation—Real Estate	2,248,000
Total	$18,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The overall project is essentially complete and in operation. The Final Operating and Maintenance Environmental Impact Statement for the McClellan-Kerr Arkansas River Navigation System in the Little Rock District was filed with the Council on Environmental Quality on 6 March 1975. The final Environmental Impact Statement for Tulsa District was filed with the Council on Environmental Quality on 28 July 1975.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1949 and for construction in FY 1963. The Montgomery Point Lock and Dam is now a separate project and under construction.



Division: Southwestern District: Little Rock Project: McClellan-Kerr Arkansas River Navigation System, Locks and Dams Arkansas and Oklahoma

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Montgomery Point Lock and Dam, AR (Continuing)

LOCATION: This project is located in Desha County, Arkansas, on the White River approximately one half mile from the Mississippi River.

DESCRIPTION: The authorized project provides for the improvement of the Arkansas River and its tributaries by the construction of dams and channels to serve navigation, afford additional flood control, produce hydroelectric power, and provide related benefits, such as recreation and wildlife propagation. The navigation feature of the project consists of a 9-foot navigation channel from the Mississippi River to Catoosa, Oklahoma, 15 miles east of Tulsa. The Montgomery Point Lock and Dam will be the first lock and dam on the system.

AUTHORIZATION: River and Harbor Act of 1946.

REMAINING BENEFIT-REMAINING COST RATIO: 1.10 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 1.14 to 1 at 8 percent.

INITIAL BENEFIT-COST RATIO: 1.14 to 1 at 8 percent (FY 1997).

BASIS OF BENEFIT-COST RATIO: Benefits are derived from an evaluation report approved in January 1994 at 1 October 1993 price levels.

SUMMARIZED FINANCIAL DATA	
Estimated Federal Cost (CoE)	$262,000,000
Estimated Non-Federal Cost	0
Total Estimated Project Cost	$262,000,000

STATUS (1 Jan 2003)	**PCT CMPL**	**PHYSICAL COMPLETION SCHEDULE**
Entire Project	76	To be determined

SUMMARIZED FINANCIAL DATA (CONTINUED)

		ACCUM PCT OF EST FED COST
Allocations to 30 September 2002	$192,785,000	73
Conference Allowance for 2003	To be determined.	
Allocation for 2003	To be determined.	
Allocations through 2003	To be determined.	
Allocation Requested for FY 2004	20,000,000	
Programmed Balance to Complete	To be determined.	
Unprogrammed Balance to Complete after 2004	0	

PHYSICAL DATA

Channels: White River - 9.8 mi, 300' wide, mi 9.8 to 0.0

Locks: Type - Single Chamber, single lift with miter gates
Size - 110' X 600' Lift up to 20 feet.
Normal (maximum) Lift - Varies from 14' for Lock No. 4 to 30' for Lock No. 1.

Dams: Movable navigable type with "bottom" operated gates

Lands and Damages:
Acres: 858 Type: Timber Improvements: None

JUSTIFICATION: The McClellan-Kerr Arkansas River Navigation System was conceived and authorized as an overall plan made up of a group of interrelated elements consisting of lakes, multiple-purpose structures, navigation structures, and bank stabilization works, all designed on a coordinated basis to provide for development of optimum benefits. The project opened for navigation from the Mississippi River to the Port of Tulsa at Catoosa, Oklahoma in 1970. The White River Entrance Channel, the first 10 miles of the McClellan-Kerr Arkansas River Navigation Project, is the only reach in the navigation system where the minimum stage is not controlled by a downstream dam, but by the stages of the Mississippi River. Changes on the Mississippi River have been observed for a number of years and have resulted in low water problems in the White River Entrance Channel. Construction of the Montgomery Point Lock and Dam will greatly increase the reliability of the system as requested by the users. A more reliable system should increase commerce to 35-45 million tons per year. The average annual benefits, based on October 1993 price levels, are as follows:

Annual Benefits	Amount
Navigation	$20,327,000
Area Redevelopment	700,000
Total	$21,027,000

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Construction of Lock and Dam	$19,046,000
Planning, Engineering and Design	477,000
Construction Management	477,000
Total	$20,000,000

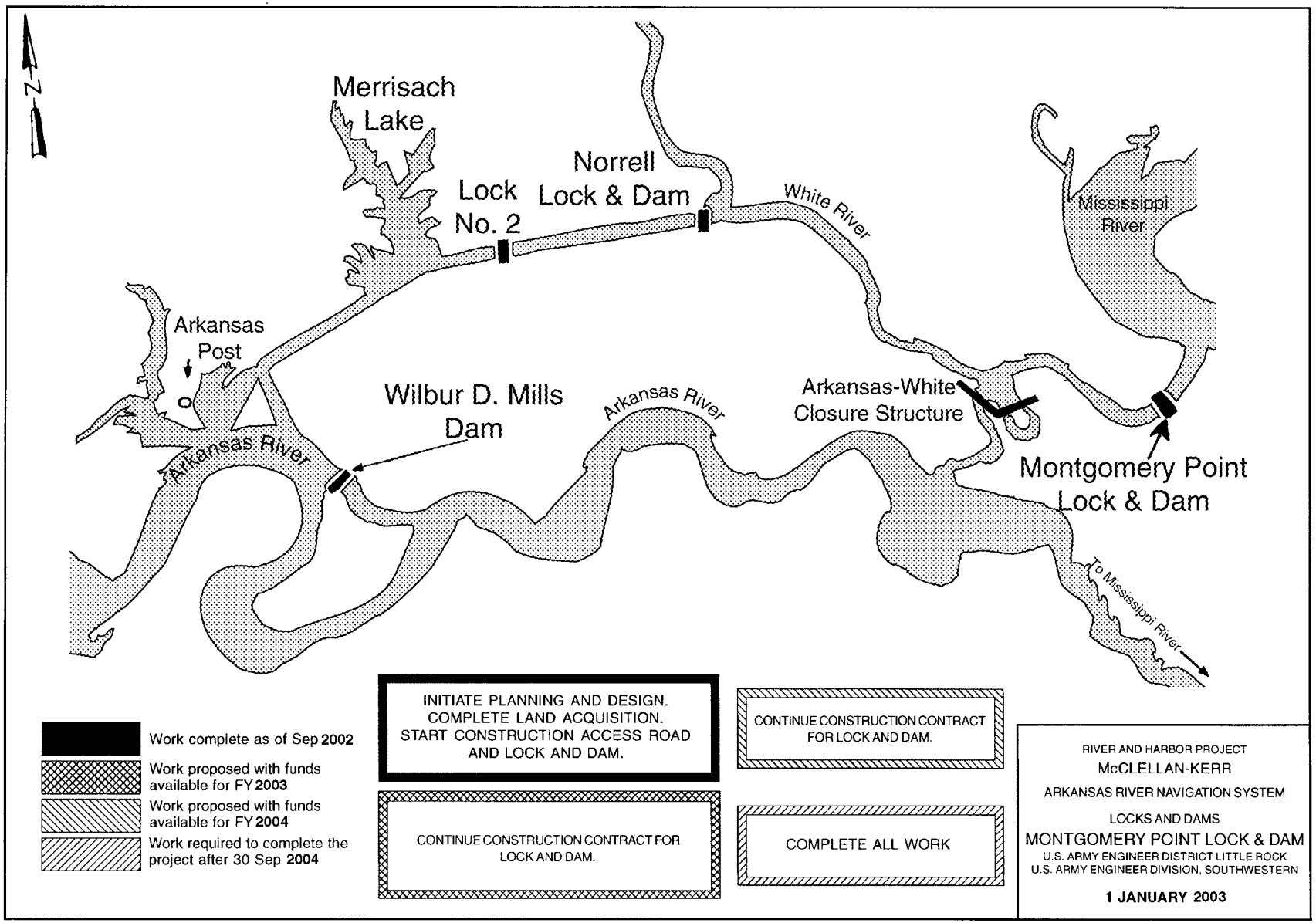
NON-FEDERAL COST: None

STATUS OF LOCAL COOPERATION: Congress has determined that the Inland Waterways Trust Fund will not be used. There are no other cost sharing or repayment requirements applicable to the project.

COMPARISON OF FEDERAL (CORPS OF ENGINEERS) COST ESTIMATES: The current Federal cost estimate of $262,000,000 is the same as the latest estimate ($262,000,000) submitted to Congress (FY 2003).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The overall navigation system is essentially complete and in operation. The Final Operating and Maintenance Environmental Impact Statement for the McClellan-Kerr Arkansas River Navigation System in the Little Rock District was filed with the Council on Environmental Quality on 6 March 1975. The final Environmental Impact Statement for Tulsa District was filed with the Council on Environmental Quality on 28 July 1975. The final Environmental Impact Statement for the Montgomery Point Lock and Dam was filed with the Environmental Protection Agency on 28 June 1991.

OTHER INFORMATION: The McClellan-Kerr project was authorized by the River and Harbor Act of 1946 and it has been determined the Montgomery Point Lock and Dam was included in the authorization. The real estate estimate includes purchase of 703 acres that will be used to mitigate construction of the Montgomery Point Lock and Dam. Acquisition of land for the lock and dam was completed in FY 1996. The construction contract for the lock and dam was awarded in July 1997.



Division: Southwestern District: Little Rock Project: Montgomery Point Lock and Dam, Arkansas

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Arkansas City, Kansas (Continuing)

LOCATION: The project is located at the confluence of the Arkansas and Walnut Rivers in southern Kansas in Cowley County.

DESCRIPTION: The authorized plan, the National Economic Development Plan, consists of raising and extending the existing levee to provide standard project flood protection for the city. The lower end of the Walnut River Channel will be modified to a 350-foot bottom width with 3 to 1 side slopes for 1.9 miles and the C Street Canal will be modified to a 25 to 50-foot bottom width with 2 to 1 side slopes for 1.2 miles. The locally preferred plan (LPP) will combine most of the levee in the Walnut River floodplain with a highway by-pass embankment. The LPP will also extend the area of protection beyond that of the National Economic Development Plan.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 15.0 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 3.0 to 1 at 8 percent.

INITIAL BENEFIT-COST RATIO: 2.8 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest evaluation approved in June 1994, at 1994 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2003)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$ 23,800,000		Entire Project	67	To be determined.
Estimated Non-Federal Cost	8,000,000				
Cash Contribution	$3,000,000				
Other Costs	5,000,000				
Total Estimated Project Cost	$ 31,800,000				
Allocations to 30 September 2002	15,886,000				
Conference Allowance for FY 2003	To be determined.				
Allocation for FY 2003	To be determined.				

PHYSICAL DATA

Grass and Stone Lined Channels: Length-1.9 miles
Bottom Width - 350 feet, Walnut River
- 25 to 50 feet, C Street Canal

Levees:
Length - 6 miles
Crest Width - 10 feet
Average Height - 21 feet

SUMMARIZED FINANCIAL DATA (Continued):

		ACCUM. PCT. OF EST. FED. COST
Allocations through FY 2003	To be determined.	
Allocation Requested for FY 2004	2,600,000	
Programmed Balance to Complete	To be determined.	
Unprogrammed Balance to Complete after FY 2003	0	

JUSTIFICATION: The project will provide protection from periodic floods, which have inundated the city numerous times in past years during periods of heavy spring and summer rains and storms. The maximum flood of record that of 1923 with a 50-year frequency would have caused an estimated $59 million in damages at October 1999 prices and conditions of development. Over $450 million in improvements would be severely impacted by events greater that 45-year on the Arkansas River and 75-year on the Walnut River. Average annual benefits are $7,980,000, all flood damage prevention, based on January 1994 price levels.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Construction	$ 1,991,000
Planning, Engineering & Design	419,000
Construction Management	190,000
Total	$ 2,600,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way and dredged material disposal areas.	$1,000,000	
Modify or relocate utilities, roads, bridges (except railroad bridges and other facilities, where necessary in the construction of the project.	1,000,000	
Section 215 credit for Walnut River levee north of Madison Avenue, which is incorporated into the highway bypass.	3,000,000	
Pay 9.4 percent of the costs allocated to flood control (to bring the total cost share to 25 percent) and bear all cost of operation, maintenance and replacement of flood control facilities.	3,000,000	$ 92,000
Total Non-Federal Costs	$8,000,000	$ 92,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

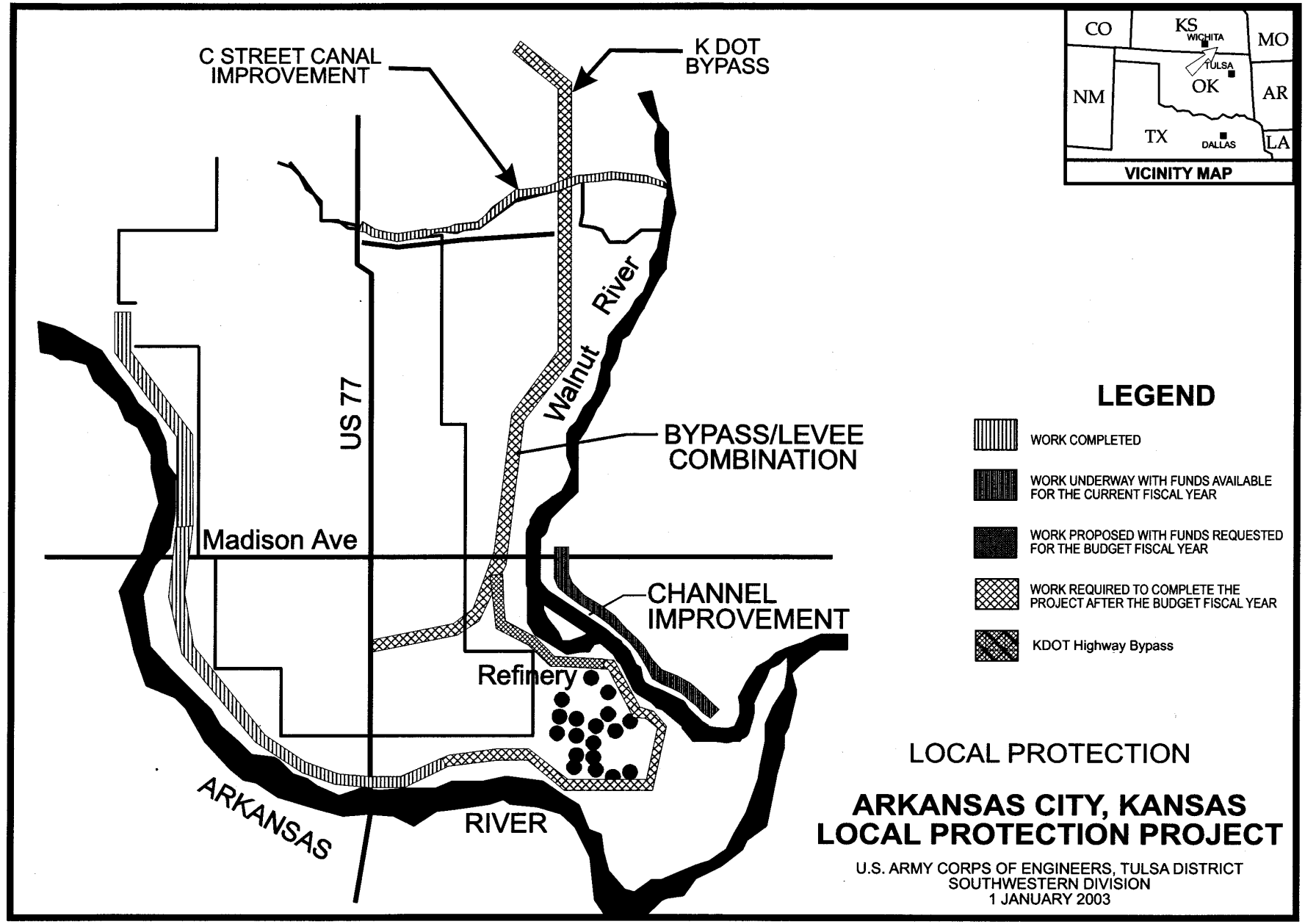
STATUS OF LOCAL COOPERATION: The city of Arkansas City indicated a willingness and capability by signing a resolution of assurance on 15 May 1994, and has since provided a letter of continued support for the project dated 28 December 1999. The Project Cooperation Agreement (PCA) was executed 4 September 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $23,800,000 is an increase of $3,100,000 from the latest estimate ($20,700,000) presented to Congress (FY 2003). The change includes the following items:

ITEM	AMOUNT
Post Contract Award and Other Estimating Adjustments	(+)$2,862,000
Price Escalation on Construction Features	(+) 238,000
Total	(+)$3,100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency in April 1995.

OTHER INFORMATION: Funds to initiate preconstruction, engineering and design were appropriated in FY 1989. Funds to initiate construction were appropriated in FY 1996. Authorization of the project, as set forth in the Water Resources Development Act of 1986, provides that the project also includes the purchase, development, and management of 35 acres of land adjacent to the Kaw Wildlife Management Area. This action would replace the 35 acres of land lost due to the Walnut River channel improvements and development of a 3.3-acre wetland, with a 1.2-acre buffer zone, in borrow area D in the northwest part of the city to mitigate the loss of 2.3 acres of wetlands. The total estimated cost for mitigation at the project is $75,000 for acquisition of 35 acres of land and $700,000 to establish a combination of high value woody vegetation and nesting cover on lands secured for mitigation.



Division: Southwestern District: Tulsa Project: Arkansas City, Kansas

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Brays Bayou, Houston, Texas (Continuing)

LOCATION: The project is located in the metropolitan area of Houston, in Harris County, Texas.

DESCRIPTION: The authorized project provides for 3 miles of channel improvements, 3 flood detention basins, 7 miles of stream diversion, and recreation features including hike-and-bike trails, picnic facilities, sports fields, comfort stations and parking areas. As stated in the Water Resources Development Act of 1996, Section 211, subject to the approval of the Secretary of the Army, the non-Federal interest may design and construct an alternative to the diversion component. The recommended plan developed by the sponsor includes all the features of the authorized plan with an alternative to the diversion component that consists of 15.7 miles of earthen channel modifications, replacement and/or lengthening of 27 bridges, and 1,900 acre-feet of stormwater detention on a tributary (Willow Waterhole).

AUTHORIZATION: Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.97 to 1 at 7 5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.97 to 1 at 7 5/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest economic analysis included in the comprehensive Feasibility Report for Buffalo Bayou and Tributaries, dated July 1990 with October 1989 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2003)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		312,530,000		Upstream Element	32.5%	To be determined.
				Downstream Element	0%	To be determined.
Estimated Non-Federal Cost		164,450,000				
Cash Contributions	26,760,000			Entire Project	17.3%	To be determined.
Other Costs	137,690,000					
Total Estimated Project Cost		$ 476,980,000				
Allocations to 30 September 2002		13,967,000				
Conference Allowance for FY 2003		To be determined.				
Allocation for FY 2003		To be determined.				
Allocations through FY 2003		To be determined.				
Allocation Requested for FY 2004		4,700,000				
Programmed Balance to Complete after FY 2004		To be determined.				
Unprogrammed Balance to Complete after FY 2004		0				

PHYSICAL DATA

Channel:
(Upstream Element)
Brays Bayou – 3.7 miles
Detention Basins - 3
(Downstream Element)
Brays Bayou – 15.7 miles
Detention Basins - 1
Bridge replacements/modifications – 27
Recreation facilities Hike-and-bike trails with picnic facilities, sports fields, and other day-use facilities.

JUSTIFICATION: Brays Bayou drains about 137 square miles in the south-central portion of the Buffalo Bayou watershed. The area is subject to rainstorms throughout the year and urban flooding is a common occurrence. About 53,400 homes and businesses are currently subject to flooding by the Standard Project Flood (SPF), and about 25,000 of these properties would be subject to flooding by a 100-year frequency flood. On an average annual basis, stream flooding could cause nearly $46,000,000 in damages per year to existing properties. The plan would reduce the existing 100-year frequency floodplain area by about 97 percent. Average annual flood damages would be reduced by about 95 percent. The recreational development will partially satisfy existing demand in the area. Average annual benefits, annualized at a 7-3/8% interest rate and based on October 1989 prices are as follows:

Annual Benefits	**Amount**
Flood Damage Prevention	87,268,400
Recreation	1,623,700
Total	88,892,100

FISCAL YEAR 2004: The total program amount of $4,700,000 will be applied as follows. Funds will be used to reimburse the Sponsor for completed discrete elements of the project in accord with Section 211(f) of Water Resources Development Act of 1996 and an executed Project Cooperation Agreement (PCA).

Partial reimbursement of sponsor for completed work (Discrete Segment #6, #7 and #9)	$4,650,000
Galveston District Section 211 implementations costs (auditing, coordinating, review of E&D, constr. management)	50,000
Total	$4,700,000

NON-FEDERAL COST & REQUIREMENTS: Brays Bayou has been identified as a demonstration project by Section 211 of the Water Resources Development Act of 1996 (P.L. 104-303). A Project Cooperation Agreement is required between the Corps and the Harris County Flood Control District, the project's sponsor. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Upstream Element		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	58,640,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	1,520,000	
Pay one-half of the separable costs allocated to recreation and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	2,685,000	300,000
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	10,239,000	247,480

Requirements of Local Cooperation (cont'd)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Downstream Element		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	39,420,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	38,110,000	
Pay one-half of the separable costs allocated to recreation and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	550,000	57,300
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	13,287,000	371,220
Total Non-Federal Costs	164,450,000	976,000

The non-Federal sponsors must also agree to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The sponsor for the flood control project is Harris County, acting through the Harris County Flood Control District. The PCA for the flood control portion of the Detention Element was executed on March 3, 2000. The current non-Federal cost estimate of $70,399,000 for this portion is an increase of $219,000 from the non-Federal cost estimate of $70,180,000 noted in the Project Cooperation Agreement (PCA). In accordance with Section 211 of the Water Resources Development Act of 1996, the sponsor is investigating the Downstream Element in an effort to find an alternative to the authorized project. A design agreement for this effort will be negotiated. There is currently no sponsor for the recreation features of the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $312,530,000 is a decrease of $1,729,000 from the latest estimate ($314,259,000) presented to Congress (FY 2003). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	(-) $1,729,000
Total	(-) $1,729,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Impact Statement was filed with the Environmental Protection Agency in September 1988. The Environmental Assessment (EA) for the Detention Element was completed on 3 April 1998 with the signing of the Finding of No Significant Impacts (FONSI).

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1990, and funds to initiate construction were appropriated in Fiscal Year 1998.

The Brays Bayou project is divided into two separable elements, an upstream and a downstream element. The upstream element has undergone design, and construction was initiated in FY 98. The downstream element is not supported by the Sponsor or the homeowners in the area, so an alternative must be identified to provide a level of protection to this portion of the Houston area. The Harris County Flood Control District (HCFCD), the local sponsor, is currently conducting reformulation studies, and has proposed an alternative to the downstream element consisting of 15.7 miles of earthen channel modifications, replacement and/or lengthening of 27 bridges, and 1,900 acre-feet of stormwater detention on a tributary (Willow Waterhole).

The project was included in the Water Resources Development Act of 1996 (Section 211(f)(6)) as a demonstration project to show advantages and effectiveness of non-Federal interests to undertake planning, design, and construction of Federal Flood Control projects. The HCFCD will receive reimbursement upon completion and approval of discrete segments of the authorized project. Each discrete segment's work will be audited prior to reimbursement. Funds being appropriated will be used to reimburse the sponsor and to pay Corps oversight costs.

Upstream Separable Element

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		137,056,000
Estimated Non-Federal Cost		73,084,000
Cash Contributions	12,924,000	
Other Costs	60,160,000	

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 4.3 to 1 at 7 5/8 percent.

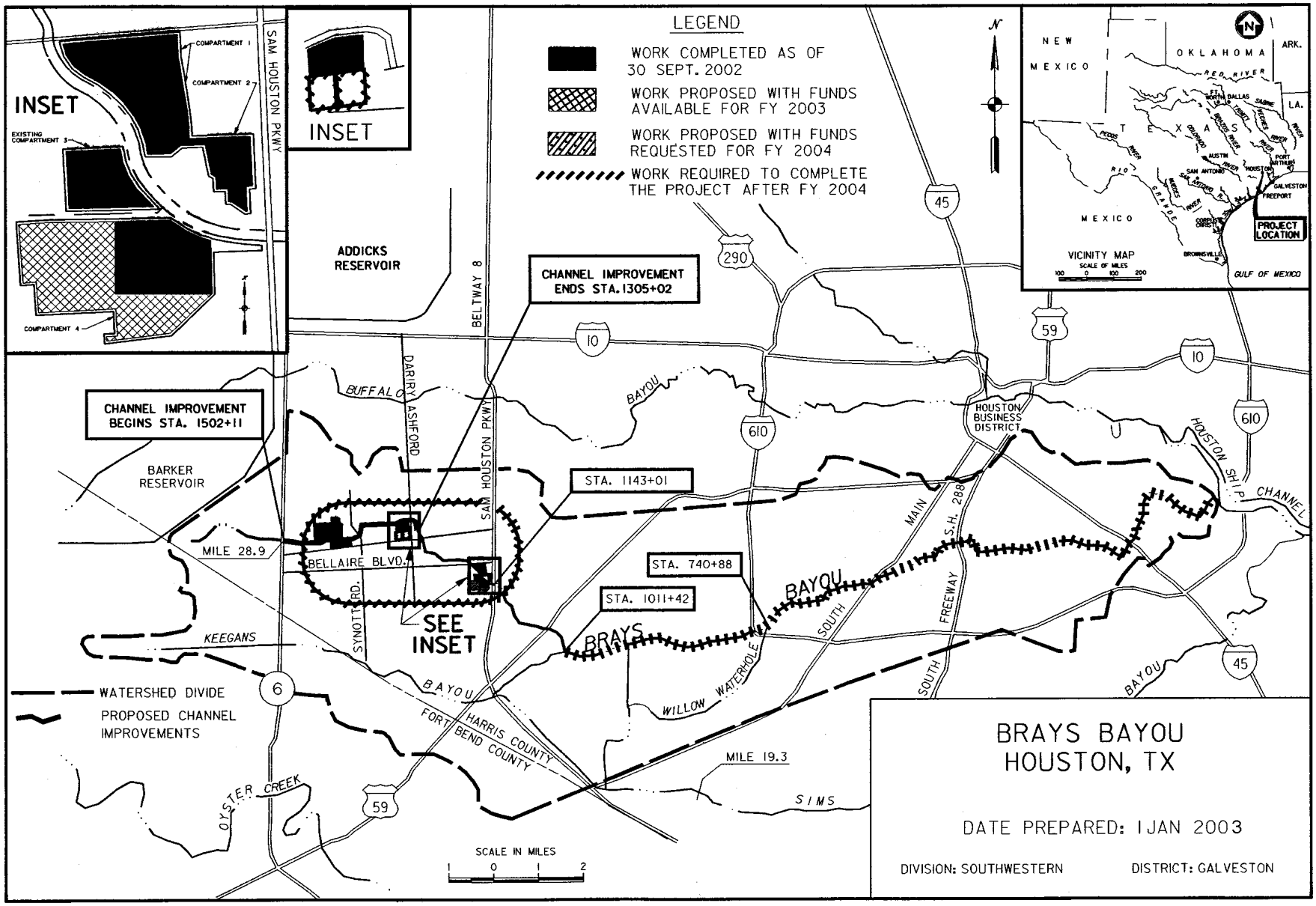
Downstream Separable Element

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		175,473,000
Estimated Non-Federal Cost		91,367,000
Cash Contributions	13,837,000	
Other Costs	77,530,000	

REMAINING BENEFIT-REMAINING COST RATIO: 3.6 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.4 to 1 at 7 5/8 percent.


LEGEND
WORK COMPLETED AS OF 30 SEPT. 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2004
INSET
COMPARTMENT 1
COMPARTMENT 2
EXISTING COMPARTMENT 3
COMPARTMENT 4
SAM HOUSTON PKWY
ADDICKS RESERVOIR
BELTWAY 8
CHANNEL IMPROVEMENT ENDS STA. 1305+02
CHANNEL IMPROVEMENT BEGINS STA. 1502+11
BARKER RESERVOIR
BUFFALO BAYOU
DAIRY ASHFORD
SAM HOUSTON PKWY
STA. 1143+01
MILE 28.9
BELLAIRE BLVD.
SYNOTT RD.
SEE INSET
STA. 740+88
STA. 1011+42
BRAYS BAYOU
MAIN
S.H. 288
SOUTH FREEWAY
HOUSTON BUSINESS DISTRICT
HOUSTON SHIP CHANNEL
KEEGANS BAYOU
WILLOW WATERHOLE
SOUTH BAYOU
HARRIS COUNTY
FORT BEND COUNTY
MILE 19.3
SIMS
OYSTER CREEK
WATERSHED DIVIDE
PROPOSED CHANNEL IMPROVEMENTS
SCALE IN MILES
0 1 2
VICINITY MAP
NEW MEXICO
OKLAHOMA
ARK.
LA.
TEXAS
MEXICO
GULF OF MEXICO
PROJECT LOCATION
BRAYS BAYOU
HOUSTON, TX
DATE PREPARED: 1JAN 2003
DIVISION: SOUTHWESTERN
DISTRICT: GALVESTON

APPROPRIATION TITLE: Construction, General – Local Protection (Flood Control)

PROJECT: Johnson Creek, Upper Trinity River Basin, Arlington, TX (Continuing)

LOCATION: Arlington, Texas

DESCRIPTION: The Johnson Creek project includes a buy-out of 140 structures for flood damage reduction, 155 acres of ecosystem restoration, and 2.25 miles of linear recreation features. The buy-out would prevent damages during a 25-year flood event.

AUTHORIZATION: Public Law 106-53, Section 101(b)(14).

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 6-1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 6-7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 7-1/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in the Interim Feasibility Report dated March 1999.

SUMMARIZED FINANCIAL DATA		**ACCUM PCT. OF EST. FED. COST**	**STATUS (1 JAN 2003)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Estimated Federal Cost	$19,900,000	0	Entire Project	65	To be determined.
Estimated Non-Federal Cost	8,240,000				
Cash Contributions	625,000				
LERRDs	20,148,000				
Reimbursable	(12,533,000)				
Total Estimated Project Cost	$28,140,000				

PHYSICAL DATA

Buy-out of 140 structures for flood damage reduction
Ecosystem restoration of 155 acres
2.25 miles of linear recreation

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM PCT. OF EST. FED COST
Allocations to 30 September 2002	$ 11,020,000	55
Conference Allowance for FY 2003	To be determined.	
Allocation for FY 2003	To be determined.	
Allocations through FY 2003	To be determined.	
Allocation Requested for FY 2004	2,200,000	
Programmed Balance to Complete after FY 2004	To be determined.	
Unprogrammed Balance to Complete after FY 2004	0	0

JUSTIFICATION: The Johnson Creek watershed, which has a drainage area of 21 square miles, lies principally in Tarrant County with a small portion lying in Dallas County. Much of the watershed, which is extensively developed, is being used for industrial, residential, commercial, and recreational activities. The Six Flags Over Texas Amusement Park, the Ballpark at Arlington, and the Arlington Convention Center are all located along the banks of Johnson Creek. A total of 556 structures, with an estimated total value of $66.6 million, were identified within the Standard Project Flood limits of Johnson Creek. Historically, numerous flood events have occurred along Johnson Creek. The flood of record occurred on 16-17 May 1989, which damaged 175 structures and overtopped the eight major bridges by as much as five feet. The flood of 26-27 March 1977 inundated about 70 homes, and one person drowned. The average annual benefits are $1,910,000 based on October 1998 price levels.

Annual Benefits	Amount
Flood Damage Reduction	$ 791,000
Recreation	1,119,000
Total	$1,910,000

Ecosystem Restoration – net increase of 117 Average Annual Habitat Units

FISCAL YEAR 2004: The requested amount will be applied as follows:

Construction Management	175,000
Fish & Wildlife	1,150,000
Roads/Railroads/Recreation Facilities	525,000
Planning, Engineering & Design	150,000
Contingencies	200,000
Total	$ 2,200,000

NON-FEDERAL COST: In accordance with the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	**Payments During Construction and Reimbursements**	**Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs**
Provide lands; easements; rights-of-way; relocation payments and assistance to displaced persons; disposal areas for borrow and excavated or dredged material; and modify or relocate utilities roads, bridges and other facilities, where necessary, for the construction of the project.	$7,615,000	0
Pay 35 percent of Flood Damage Reduction	0	$ 32,700
Pay 35 percent of Ecosystem Restoration	0	17,600
Pay one-half of the separable costs allocated to recreation plus 100 percent of recreation costs above Federal limit.	625,000	55,000
Total Non-Federal Costs	$ 8,240,000	$ 105,300

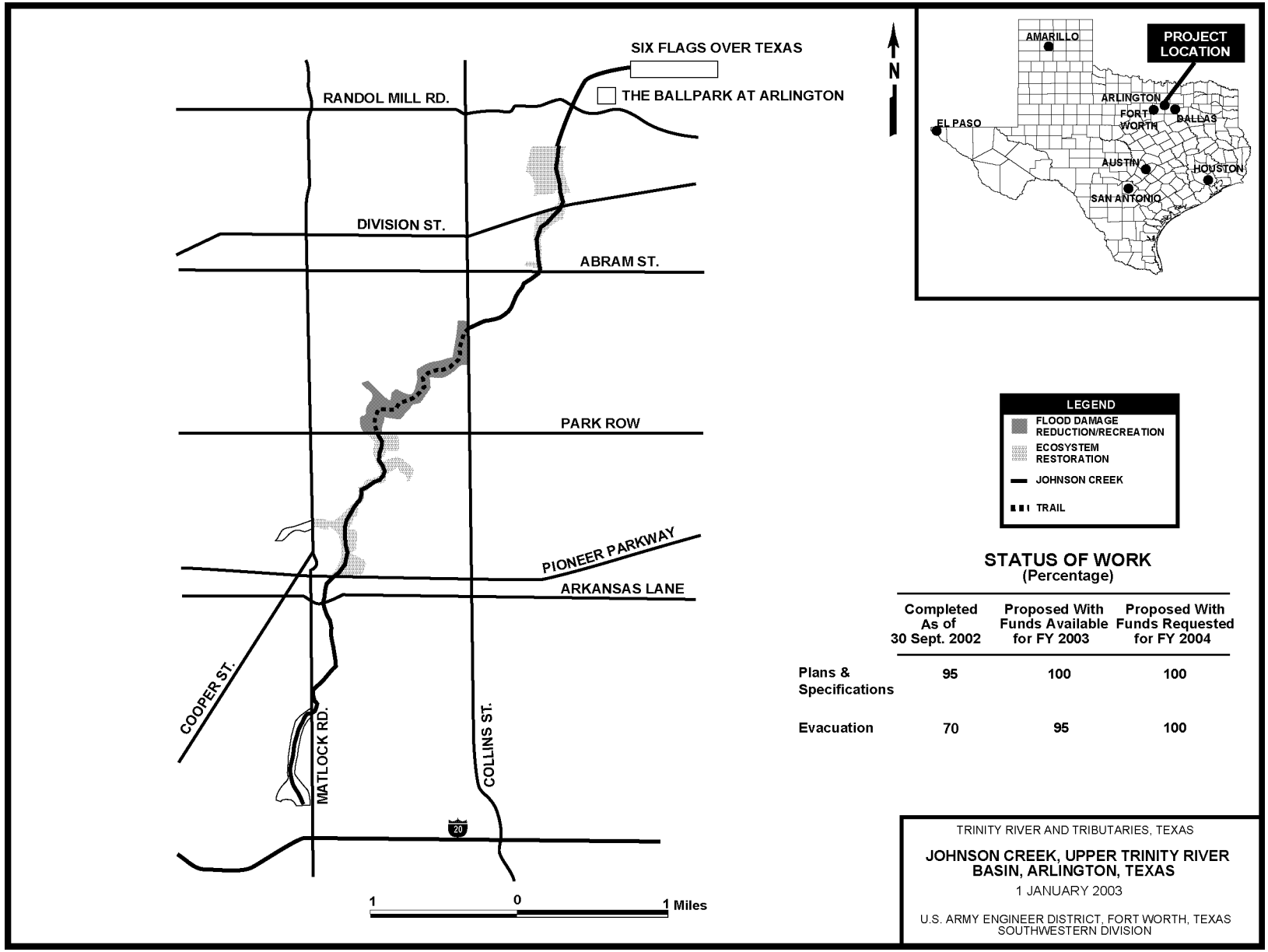
The non-Federal sponsor will make all required payments concurrently with project construction. The non-Federal sponsor will also bear all costs of operation, maintenance, repair, rehabilitation and replacement of project features.

STATUS OF LOCAL COOPERATION: The city of Arlington, Texas, signed the Project Cooperation Agreement on 1 December 2000. The city of Arlington will fund the non-Federal portion of this project with the sale of bonds and certificates of obligation by the city of Arlington. The city, through approval of a Section 104 agreement, has already expended $7,528,000 on the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $19,900,000 is an increase of $5,470,000 over the latest estimate of $14,430,000 submitted to Congress in Fiscal Year 2003. This increase is due to higher than estimated costs for demolition (asbestos cleanup requirements), acquisition of structures (condemnations), and lands associated with ecosystem restoration (approval/acquisition/condemnation).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Finding of No Significant Impact was prepared as part of the Environmental Assessment and was executed on 4 September 1998. Fish and wildlife mitigation is not required for this non-structural project.

OTHER INFORMATION: The Assistant Secretary of the Army, Civil Works, approved a Section 104, Public Law 99-662, General Credit for Flood Control, on 5 February 1997. Funds to initiate construction were appropriated in Fiscal Year 2000.



STATUS OF WORK
(Percentage)

	Completed As of 30 Sept. 2002	Proposed With Funds Available for FY 2003	Proposed With Funds Requested for FY 2004
Plans & Specifications	95	100	100
Evacuation	70	95	100

TRINITY RIVER AND TRIBUTARIES, TEXAS

JOHNSON CREEK, UPPER TRINITY RIVER BASIN, ARLINGTON, TEXAS

1 JANUARY 2003

U.S. ARMY ENGINEER DISTRICT, FORT WORTH, TEXAS
SOUTHWESTERN DIVISION

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Sims Bayou, Houston, TX (Continuing)

LOCATION: The project is located in Harris County, in the southern portion of Houston, Texas.

DESCRIPTION: The project provides flood damage reduction and consists of 19.3 miles of channel enlargement, rectification, and erosion control measures. Environmental quality measures, riparian habitat improvements, and recreational features are also included in the project.

AUTHORIZATION: Water Resources Development Act (WRDA) of 1986, Energy and Water Development Appropriations Act of 1990, and WRDA of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 12.2 to 1 at 8 5/8 percent.

TOTAL BENEFIT-COST RATIO: 6.8 to 1 at 8 5/8 percent.

INITIAL BENEFIT-COST RATIO: 9.3 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from Supplement 1 to the General Design Memorandum dated May 1993 at October 1992 price levels. Costs are based on the GDM Supplement 1 at October 1992 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2003)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		231,780,000		Entire Project	60	To be determined.
Estimated Non-Federal Cost		112,310,000				
Cash Contribution	20,340,000					
Other Costs	91,970,000					
Total Estimated Project Cost		344,090,000				
Allocations to 30 September 2002		122,335,000				
Conference Allowance for FY 2003		To be determined.				
Allocation for FY 2003		To be determined.				
Allocations through FY 2003		To be determined.				
Allocation Requested for FY 2004		12,000,000				
Programmed Balance to Complete after FY 2004		To be determined.				
Unprogrammed Balance to Complete after FY 2004		0				

PHYSICAL DATA

Channels:
Sims Bayou - 19.3 miles
Relocations:
Railroad bridges
Utilities
Roads
Recreation facilities:
Hike-and-bike trails with picnic and other day-use facilities

JUSTIFICATION: The project will reduce damage from stream flooding to 14,800 acres of urban lands and beneficially affect nearly 78,000 persons living in 29,000 homes. The 100-year flood plain would be reduced to 2,300 acres outside the required rights-of-way. The recreational development will partially satisfy existing demand in the area. Average annual benefits, annualized at an 8-5/8% interest rate and based on October 1992 prices are as follows:

Annual Benefits	Amount
Flood Damage Prevention	219,344,700
Recreation	945,300
Total	220,290,000

FISCAL YEAR 2004: The requested amount of $12,000,000 will be applied as follows:

Continue construction	$10,000,000
Reimbursement to Project Sponsor	300,000
Planning, Engineering, and Design	900,000
Construction Management	800,000
Total	$12,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	**Payments During Construction and Reimbursements**	**Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs**
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	40,010,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	51,650,000	
Pay one-half of the separable costs allocated to recreation and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	3,485,000	139,000
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	16,855,000	331,000
Credit for preparation of the dredged material disposal area for the Mouth to PTRR reach and completed miscellaneous engineering and design activities.	310,000	
Total Non-Federal Costs	112,310,000	470,000

The non-Federal sponsors must also agree to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The sponsor for the flood control project is Harris County. The current non-Federal cost estimate of $112,310,000 for flood control, which includes a cash contribution of $20,340,000, is an increase of $25,710,000 from the non-Federal cost estimate of $86,600,000 noted in the Local Cooperation Agreement (LCA), which reflected a cash contribution of $13,800,000. In a letter dated 19 September 1991, the non-Federal sponsor indicated that it is financially capable and willing to contribute the increased non-Federal share. Analysis (dated 31 October 1991) of the non-Federal sponsor's financial capability to participate in the project reaffirms that the sponsor has a reasonable and implementable plan for meeting their financial commitment as expressed in the LCA. In 1993, the City of Houston indicated its desire to sponsor the recreation features for the project. In April 1999 the City provided a letter indicating its renewed interest in sponsorship. Coordination has been initiated for a Limited Reevaluation Report and the Project Cooperation Agreement for the recreation features.

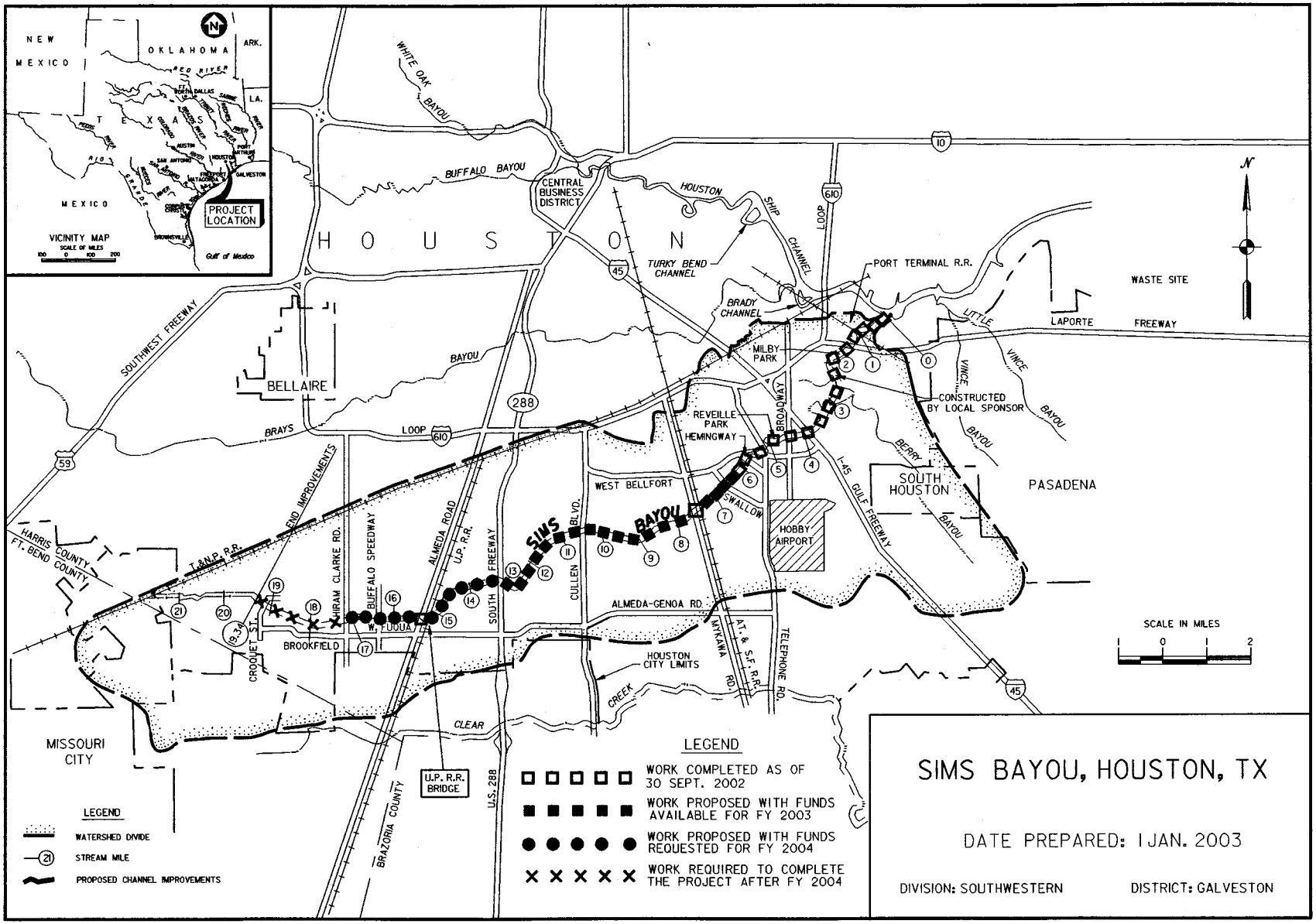
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $231,780,000 is an increase of $2,615,000 from the latest estimate ($229,165,000) presented to Congress (FY 2003). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	(+) 2,615,000
Total	(+) $2,615,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency in September 1983.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1986 and funds to initiate construction were appropriated in Fiscal Year 1990.

The Assistant Secretary of the Army for Civil Works has approved the sponsor's request for credit for work performed by the local sponsor. This credit is currently estimated at $20,070,000, exclusive of lands and is being reimbursed during the period of construction. The project authorization was amended by the Energy and Water Development Appropriations Act of 1990 as the project cost estimate exceeded the maximum cost growth as described in Section 902 of the Water Resources Development Act of 1986. The authorization has been further modified by WRDA '92, Section 102 (66), to include, to the extent practicable, measures to improve environmental quality and riparian habitat.


VICINITY MAP
PROJECT LOCATION
Gulf of Mexico
MEXICO
NEW MEXICO
OKLAHOMA
ARK.
LA.
TEXAS
HOUSTON
WHITE OAK BAYOU
BUFFALO BAYOU
CENTRAL BUSINESS DISTRICT
HOUSTON SHIP CHANNEL
TURKY BEND CHANNEL
BRADY CHANNEL
PORT TERMINAL R.R.
WASTE SITE
LAPORTE FREEWAY
LITTLE VINCE BAYOU
CONSTRUCTED BY LOCAL SPONSOR
MILBY PARK
REVEILLE PARK
HEMINGWAY
BROADWAY
BERRY BAYOU
SOUTH HOUSTON
PASADENA
I-45 GULF FREEWAY
SOUTHWEST FREEWAY
BELLAIRE
BRAYS BAYOU
LOOP 610
288
59
45
10
WEST BELLFORT
SWALLOW
HOBBY AIRPORT
SIMS BAYOU
CULLEN BLVD.
SOUTH FREEWAY
U.P. R.R.
ALMEDA ROAD
BUFFALO SPEEDWAY
HIRAM CLARKE RD.
T&NO R.R.
HARRIS COUNTY
FT. BEND COUNTY
END IMPROVEMENTS
ALMEDA-GENOA RD.
FUQUA
BROOKFIELD
CROQUET ST.
MYKAWA RD.
AT. & S.F. R.R.
TELEPHONE RD.
HOUSTON CITY LIMITS
CLEAR CREEK
MISSOURI CITY
BRAZORIA COUNTY
U.P. R.R. BRIDGE
U.S. 288
SCALE IN MILES
0 1 2
LEGEND
WATERSHED DIVIDE
STREAM MILE
PROPOSED CHANNEL IMPROVEMENTS
LEGEND
WORK COMPLETED AS OF 30 SEPT. 2002
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2003
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2004
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2004
SIMS BAYOU, HOUSTON, TX
DATE PREPARED: 1 JAN. 2003
DIVISION: SOUTHWESTERN
DISTRICT: GALVESTON

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance

PROJECT: Table Rock Lake, Missouri and Arkansas, (Continuing)

LOCATION: Table Rock Dam is located on the White River 528.8 miles above its mouth, in Stone and Taney Counties in southwest Missouri near the city of Branson.

DESCRIPTION: Table Rock Dam has been shown to be hydrologically deficient, with storage available to contain 65 percent of the Probable Maximum Flood (PMF). Studies indicate that this flood would overtop the dam more than five feet and would breach the earthen embankment portion of the dam, causing catastrophic flood conditions for downstream areas including Branson. The project consists of the design and construction of an auxiliary gated spillway located just downstream of the existing left embankment, which will serve as a cofferdam during construction. The project includes the construction of a bridge to cross the spillway and a slight realignment of State Highway 165/265 on top of the existing dam. Coordination is ongoing with the Missouri Highway and Transportation Department.

AUTHORIZATION: Flood Control Acts of 1938, 1941 and 1944.

REMAINING BENEFITS-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not Applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA			**STATUS (1 Jan 2003)**	**PCT CMPL**	**PHYSICAL COMPLETION SCHEDULE**
Original Project			Entire Project	79	To be determined.
Actual Federal Cost		$16,233,000			
Actual Non-Federal Cost		49,867,000			
Cash Contributions	0				
Hydropower Reimbursement	49,867,000				
Total Original Project Cost		66,100,000			

SUMMARIZED FINANCIAL DATA (CONTINUED)

			ACCUM PCT OF EST FED COST
Remedial Work or Project Modification			
Estimated Total Appropriation Requirement		$72,900,000	
Future Non-Federal Reimbursement		7,538,000	
Estimated Federal Cost (Ultimate)		65,362,000	
Estimated Non-Federal Cost		7,538,000	
Reimbursement		7,538,000	
Hydropower	$7,538,000		
Total Estimated Project Cost		$72,900,000	
Allocations to 30 September 2002		$55,620,000	76
Conference Allowance for FY 2003		To be determined.	
Allocation for FY 2003		To be determined.	
Allocations through FY 2003		To be determined.	
Allocation Requested for FY 2004		5,000,000	
Programmed Balance to Complete		To be determined.	
Unprogrammed Balance to Complete After FY 2004		0	

PHYSICAL DATA: The dam, which was started in October 1952 and completed in November 1958, consists of a 1,602 foot concrete gravity section and two earth fill embankment structures with a length of 4,821 feet. Total length of the dam is 6,423 feet rising to a maximum height of 252 feet above the streambed. The structure has four 4 foot by 9 foot sluices. The gated spillway consists of ten bays, each 45 feet wide, controlled by 37-foot high tainter gates. The dam contains four 50,000-kw power units, each supplied by an 18-foot diameter penstock. Storage is provided in the reservoir for water supply, flood control, and generation of hydroelectric power. The original plan of improvement was to raise the top of the existing dam by ten feet. The current plan under construction will provide an auxiliary gated spillway in place of part of the existing earthen embankment on the left side, looking downstream. This gated emergency spillway consists of eight bays, each 48 feet wide, controlled by 43-foot high tainter gates.

JUSTIFICATION: The Program Evaluation Report of December 1994 found that the existing spillway would not safely pass the probable maximum flood without overtopping the dam; therefore, structural modifications to increase the reservoir capacity are recommended. It has been determined that this flood would overtop the dam by more than five feet and that failure of the earthen portion of the dam would occur.

A Table Rock Dam failure would cause about $363 million of downstream damages. Damages would consist of $171 million to commercial and residential structures, $44.4 million to recreation facilities, $46 million to roads and bridges, $95 million to hydropower facilities at Table Rock and Bull Shoals projects and $6.3 million to the Shepherd of the Hills Fish Hatchery. In addition, Table Rock Lake Project is estimated to generate $106 million annually from project purposes of flood control, recreation, and hydropower. These benefits would be lost if the dam were to fail. A failure of the dam could put 12,400 people at risk to injury and death with major damages to the city of Branson, Missouri.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Construction on Auxiliary Gates Spillway	$ 4,200,000
Planning, Engineering and Design	200,000
Construction Management	600,000
Total	$ 5,000,000

NON-FEDERAL COST: The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	**Payments During Construction and Reimbursements**	**Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs**
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hydropower facilities.	$7,538,000	$0
Total Non-Federal Costs	$7,538,000	$0

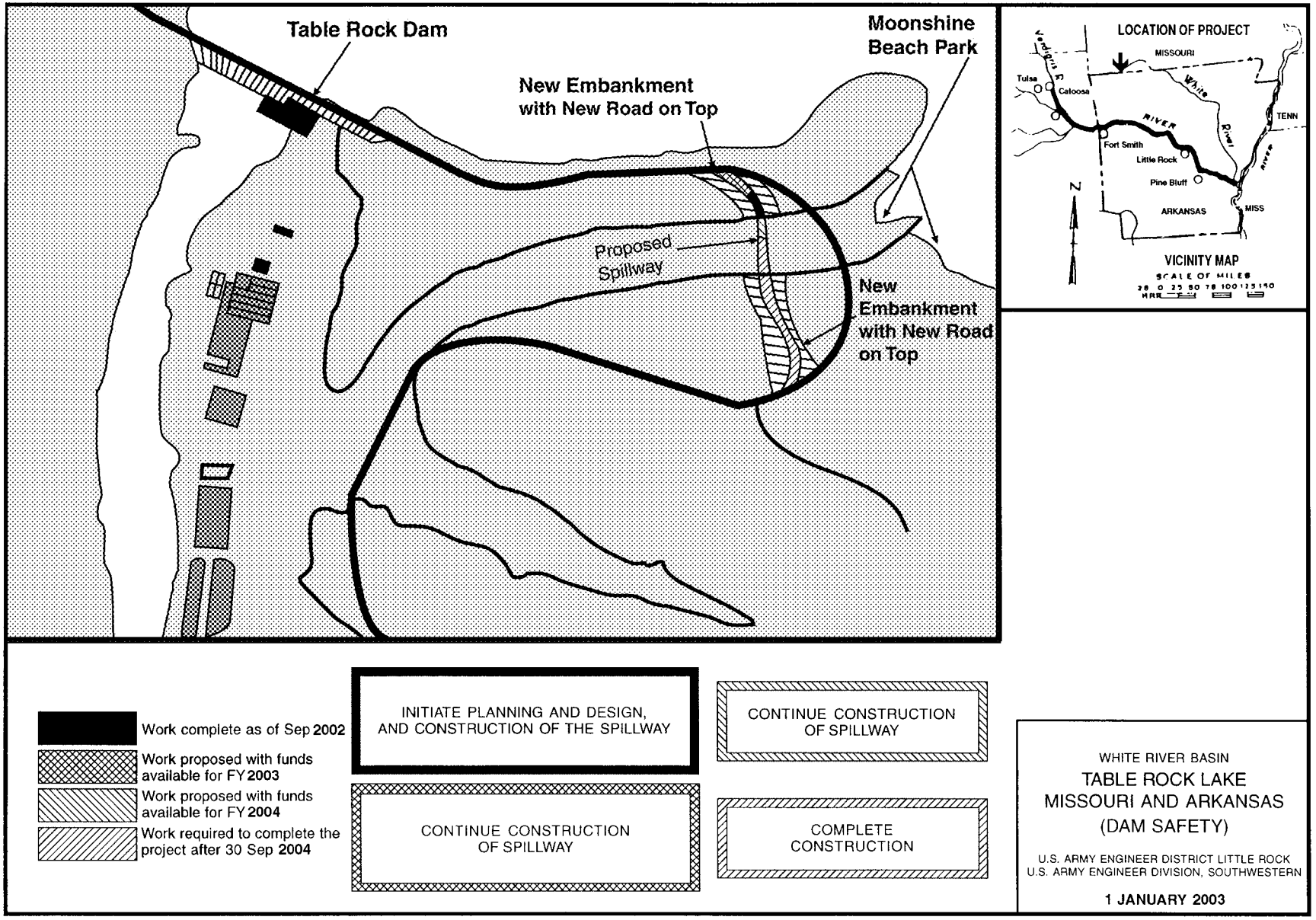
STATUS OF LOCAL COOPERATION: The Southwestern Power Administration has been contacted and understands the requirement for reimbursement of costs allocated to power.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $72,900,000 is an increase of $12,700,000 from the latest estimate (60,200,000) submitted to Congress (FY 2003). The change in total estimate includes the following items.

Item	Amount
The second phase of construction was awarded at greater than estimated.	$ 5,658,000
The third phase for relocating the Moonshine Beach recreation facilities increased due to movement of the facilities further than anticipated, increasing the length of road, requiring additional rock removal and the current facilities were designed to handicap standards.	6,917,000
Replace trunion pins and operating chains that were defective on the exiting spillway gates.	2,435,000
Price level increases	317,000
Other offsetting reductions	-2,627,000
Total	$12,700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Finding of No Significant Impact was signed in October 1997.

OTHER INFORMATION: The initial Planning and Engineering was accomplished using Operation and Maintenance, General funds.



Division: Southwestern District: Little Rock Project: Table Rock Lake
Missouri and Arkansas
(Dam Safety)

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance

PROJECT: Tenkiller Ferry Lake, Oklahoma (Continuing)

LOCATION: The project is located on the Illinois River about 7 miles northeast of Gore and about 22 miles southeast of Muskogee, Oklahoma.

DESCRIPTION: The study area consists of the reservoir area above Tenkiller Ferry Dam up to the maximum pool caused by PMF inflow, the Illinois River floodplain from Tenkiller Ferry Dam to the Arkansas River, and the Arkansas River flood plain from Webbers Falls Lock and Dam to a point just below Fort Smith and Van Buren, Arkansas, including R. S. Kerr and W. D. Mayo reservoirs and navigation structures.

AUTHORIZATION: Flood Control Act of 1938.

BENEFIT-COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**	**STATUS (1 Jan 2003)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Original Project				Entire Project	54	To be Determined.
Actual Federal Cost		$ 24,057,718				
Actual Non-Federal Cost		0				
Cash Contributions	$ 0					
Other Costs	0					
Total Original Project Cost		$ 24,057,718				

SUMMARIZED FINANCIAL DATA (Continued):

		ACCUM PCT. OF EST. FED. COST
Project Modification		
Estimated Federal Cost	$ 39,600,000	
Estimated Non-Federal Cost	0	
Cash Contribution $ 0		
Other Costs 0		
Total Estimated Modification Cost	$ 39,600,000	
Total Estimated Project Cost	$ 63,657,718	
Allocations to 30 September 2002	21,527,000	
Conference Allowance for FY 2003	To be determined.	
Allocation for FY 2003	To be determined.	
Allocations through FY 2003	To be determined.	
Allocation Requested for FY 2004	4,400,000	
Programmed Balance to Complete	To be determined.	
Unprogrammed Balance to Complete after FY 2003	0	

PHYSICAL DATA: Construction began in June 1947. Embankment closure was completed in May 1952. The dam consists of an earthfill embankment approximately 3,000 feet in length, an earthfill dike about 1,350 feet in length and with a gated concrete gravity spillway located on the right abutment. Ten tainter gates 50 feet wide by 24 feet high regulate lake releases through the spillway. The low flow control outlet is a 19-foot diameter conduit with two service gates. The top of dam is at elevation 677.2.

An auxiliary spillway with five 50 feet wide by 35 feet high tainter gates would be constructed near the right abutment of the embankment. This spillway structure has been designed similar to the existing spillway.

JUSTIFICATION: The spillway is inadequate to pass the probable maximum flood, and if it occurred, the embankment would be overtopped for a duration of 30 hours at a peak elevation of approximately 683.5 feet. The existing spillway would pass about 85 percent of the probable maximum flood with no freeboard. If the probable maximum flood occurred and overtopping caused dam failure, severe economic damage would be incurred downstream. According to the approved Dam Safety Assurance Program Recon Report, the downstream effect of a PMF event with accompanying dam failure, would include approximately $298,000,000 of economic loss and an adverse effect on approximately 9,000 residents.

FISCAL YEAR 2004: The requested amount will be applied as follows:

Continue Construction	$ 3,818,000
Planning, Engineering & Design	156,000
Construction Management	426,000
Total	$ 4,400,000

NON-FEDERAL COST: Not applicable.

STATUS OF LOCAL COOPERATION: Not applicable.

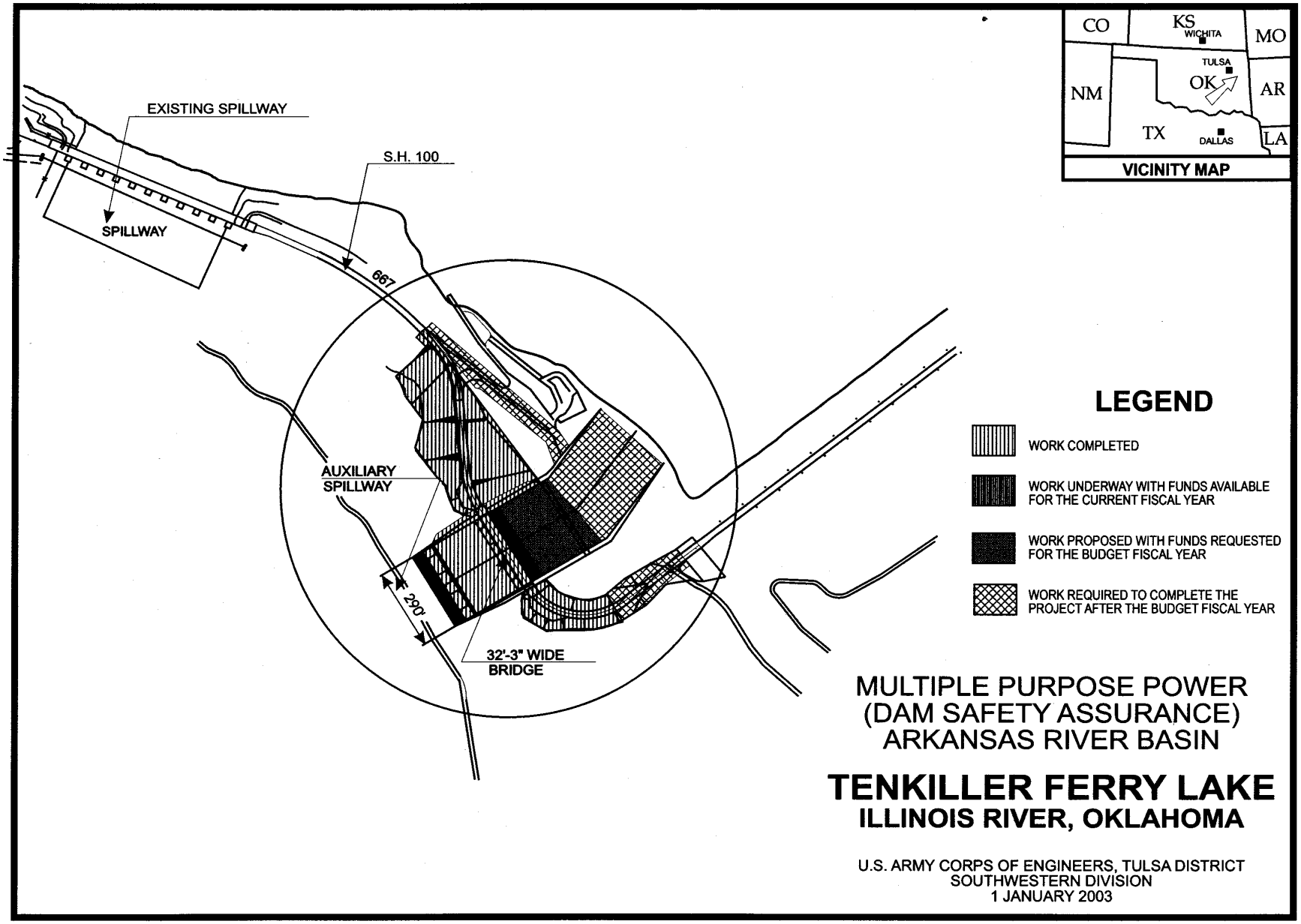
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $39,600,000 is an increase of $1,200,000 from the latest estimate ($38,400,000) presented to Congress (FY 2003). The change includes the following items:

Item		Amount
Post Contract Award and Other Estimating Adjustments	(+)	$1,001,000
Price Escalation on Construction Features	(+)	199,000
Total	(+)	$1,200,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Not required.

The provisions of Section 404 of the Clean Water Act do not apply because the project improvements do not involve the placement of fill material or the discharge of dredge material in the waters of the United States.

OTHER INFORMATION: A feature design memorandum was completed in September 1995. Plans and specifications for Phase I were completed in December 1998. The Phase 1 contract was awarded in May 1999.



Division: Southwestern District: Tulsa Project: Tenkiller Ferry Lake
Oklahoma (Dam Safety)

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

l. Navigation

a. Channels and Harbors

The budget estimate of $64,892,000 provides for essential operation and maintenance work on the 13 channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects. The requested amount includes facility security and an amount from the Inland Waterways Trust Fund equal to ¼ of the total costs of operation and maintenance of inland waterways having averaged more than 5 billion ton-miles of traffic per year for the past 5 years, and ½ of the total costs of operation and maintenance of all other inland waterways.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Texas			
Barbour Terminal Ship Channel	606,000 (0) (606,000)	659,000 (0) (659,000)	 1. None. 2. None.
Bayport Ship Channel	2,389,000 (0) (2,389,000)	0 (0) (0)	 1. None. 2. Maintenance not budgeted due to higher priority facility security requirements at other projects.
Brazos Island Harbor	2,143,000 (0) (2,143,000)	0 (0) (0)	 1. None. 2. Maintenance not budgeted due to higher priority facility security requirements at other projects.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

l. Navigation (Continued)

a. Channels and Harbors (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Texas (Continued)			
Freeport Harbor	7,298,000	4,500,000	
	(0)	(0)	1. None.
	(7,298,000)	(4,500,000)	2. Dredge navigation channel.
Galveston Harbor and Channel	4,887,000	4,676,000	
	(0)	(0)	1. None.
	(4,887,000)	(4,676,000)	2. Dredge navigation channel.
Gulf Intracoastal Waterway	20,829,000	21,329,000	
	(2,640,000)	(2,858,000)	1. None.
	(18,189,000)	(18,471,000)	2. Dredge various reaches of the navigation channel.
Houston Ship Channel	8,254,000	13,539,000	
	(0)	(0)	1. None.
	(8,254,000)	(13,539,000)	2. Dredge navigation channel.
Corpus Christi Ship Channel	5,669,000	6,650,000	
	(0)	(0)	1. None.
	(5,669,000)	(6,650,000)	2. Dredge navigation channel and remove mooring structures.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

l. Navigation (Continued)

a. Channels and Harbors (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Texas (Continued)			
Matagorda Ship Channel	1,748,000	4,690,000	
	(0)	(0)	1. None.
	(1,748,000)	(4,690,000)	2. Dredge navigation channel.
Mouth of Colorado River	2,604,000	0	
	(77,000)	(0)	1. Study completed on excessive shoaling in vicinity of Entrance Jetties in FY 2003.
	(2,527,000)	(0)	2. None.
Sabine-Neches Waterway	14,986,000	8,849,000	
	(0)	(81,000)	1. Install water control gauges in FY 2004.
	(14,986,000)	(8,768,000)	2. Dredge navigation channel.
Total Channels and Harbors	71,413,000	64,892,000	
	(2,717,000)	(2,939,000)	
	(68,696,000)	(61,953,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

1. Navigation (Continued)

b. Locks and Dams

The budget estimate of $29,493,000 provides for essential operation and repairs on one system containing 13 locks and dams. Included are: facility security, labor, supplies, materials and parts for day-to-day functioning; and periodic dredging, maintenance, repairs, or replacements of channels and structures. The requested amount also includes application of Special Recreation Use Fees (SRUF) for recreation areas. The requested amount includes an amount from the Inland Waterways Trust Fund equal to ¼ of the total costs of operation and maintenance of inland waterways having averaged more than 5 billion ton-miles of traffic per year for the past 5 years, and ½ of the total costs of operation and maintenance of all other inland waterways.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Arkansas and Oklahoma			
McClellan-Kerr Arkansas River Navigation System	27,848,000 (16,677,000) (11,171,000)	29,493,000 (16,871,000) (12,622,000)	1. None. 2. Continue repair of tainter gate weirs at Lock and Dam 14. Rehabilitate and paint tainter gates at Lock and Dam 5. Construct facility security features.
Total - Locks and Dams	27,848,000 (16,677,000) (11,171,000)	29,493,000 (16,871,000) (12,622,000)	
TOTAL – NAVIGATION	99,261,000 (19,394,000) (79,867,000)	94,385,000 (19,810,000) (74,575,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control

a. Reservoirs

The budget estimate of $93,470,000 provides for the operation and ordinary maintenance of the 62 projects named in the list which follows, and the scheduling of reservoir flood control operations in the Southwestern Division. Included are: facility security, labor, supplies, materials and parts for day-to-day functioning. The requested amount also includes application of Special Recreation Use Fees (SRUF) for recreation areas.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Arkansas			
Blue Mountain Lake	1,162,000	1,751,000	
	(919,000)	(1,024,000)	1. Budget amount increased to more realistically reflect historical expenditures.
	(243,000)	(727,000)	2. None.
DeQueen Lake	931,000	1,567,000	
	(731,000)	(880,000)	1. Budget amount increased to more realistically reflect historical expenditures.
	(200,000)	(687,000)	2. None.
Dierks Lake	959,000	1,131,000	
	(770,000)	(900,000)	1. Budget amount increased to more realistically reflect historical expenditures.
	(189,000)	(231,000)	2. None.
Gillham Lake	861,000	1,531,000	
	(697,000)	(808,000)	1. Budget amount increased to more realistically reflect historical expenditures.
	(164,000)	(723,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Arkansas (Continued)			
Millwood Lake	1,257,000	1,503,000	
	(985,000)	(1,199,000)	1. Budget amount increased to more realistically reflect historical expenditures.
	(272,000)	(304,000)	2. None.
Nimrod Lake	1,409,000	2,036,000	
	(1,154,000)	(1,193,000)	1. None.
	(255,000)	(843,000)	2. None.
Kansas			
Council Grove Lake	1,491,000	1,760,000	
	(773,000)	(828,000)	1. None.
	(718,000)	(932,000)	2. None.
El Dorado Lake	460,000	939,000	
	(357,000)	(279,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(103,000)	(660,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Kansas (Continued)			
Elk City Lake	552,000	650,000	
	(375,000)	(376,000)	1. None.
	(177,000)	(274,000)	2. None.
Fall River Lake	1,204,000	1,385,000	
	(853,000)	(834,000)	1. None.
	(351,000)	(551,000)	2. None.
John Redmond Dam and Reservoir	1,144,000	2,025,000	
	(664,000)	(1,022,000)	1. Upgraded to area office with regional responsibilities to operate seven projects within the State of Kansas.
	(480,000)	(1,003,000)	2. None.
Marion Lake	1,621,000	2,443,000	
	(989,000)	(1,438,000)	1. Conduct periodic inspection in FY 2004. Also, budget amount increased to more realistically reflect historical expenditures.
	(632,000)	(1,005,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Kansas (Continued)			
Pearson-Skubitz			
Big Hill Lake	1,052,000	984,000	
	(648,000)	(647,000)	1. None.
	(404,000)	(337,000)	2. None.
Toronto Lake	424,000	464,000	
	(357,000)	(379,000)	1. None.
	(67,000)	(85,000)	2. None.
Missouri			
Clearwater Lake	1,860,000	1,959,000	
	(1,408,000)	(1,466,000)	1. None.
	(452,000)	(493,000)	2. None.
Oklahoma			
Arcadia Lake	451,000	715,000	
	(399,000)	(291,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(52,000)	(424,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Oklahoma (Continued)			
Birch Lake	602,000	482,000	
	(385,000)	(297,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(217,000)	(185,000)	2. None.
Candy Lake	19,000	20,000	
	(19,000)	(20,000)	1. None.
	(0)	(0)	2. None.
Canton Lake	1,620,000	2,302,000	
	(948,000)	(1,129,000)	1. Budget amount increased to more realistically reflect recent history of expenditures due to aging infrastructure.
	(672,000)	(1,173,000)	2. None.
Copan Lake	821,000	707,000	
	(504,000)	(497,000)	1. None.
	(317,000)	(210,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Oklahoma (Continued)			
Fort Supply Lake	924,000	846,000	
	(445,000)	(566,000)	1. Budget amount increased to more realistically reflect recent history of expenditures due to aging infrastructure.
	(479,000)	(280,000)	2. None.
Great Salt Plains Lake	209,000	514,000	
	(136,000)	(144,000)	1. None.
	(73,000)	(370,000)	2. None.
Heyburn Lake	600,000	612,000	
	(417,000)	(361,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(183,000)	(251,000)	2. None.
Hugo Lake	1,732,000	1,638,000	
	(1,204,000)	(1,163,000)	1. None.
	(528,000)	(475,000)	2. None.
Hulah Lake	426,000	1,230,000	
	(306,000)	(269,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(120,000)	(961,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Oklahoma (Continued)			
Kaw Lake	1,931,000	2,016,000	
	(1,280,000)	(1,129,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(651,000)	(887,000)	2. None.
Oologah Lake	2,360,000	2,099,000	
	(1,433,000)	(1,073,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(917,000)	(1,026,000)	2. None.
Optima Lake	59,000	406,000	
	(38,000)	(33,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(21,000)	(373,000)	2. None.
Pensacola Reservoir - Lake O' the Cherokees	34,000	35,000	
	(34,000)	(35,000)	1. None.
	(0)	(0)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Oklahoma (Continued)			
Pine Creek Lake	1,187,000	921,000	
	(778,000)	(631,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(409,000)	(290,000)	2. None.
Sardis Lake	912,000	1,096,000	
	(681,000)	(516,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(231,000)	(580,000)	2. None.
Skiatook Lake	1,488,000	1,353,000	
	(558,000)	(762,000)	1. Budget amount increased to more realistically reflect recent history of expenditures.
	(930,000)	(591,000)	2. None.
Waurika Lake	1,498,000	1,241,000	
	(703,000)	(531,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(795,000)	(710,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Oklahoma (Continued)			
Wister Lake	580,000	948,000	
	(492,000)	(469,000)	1. None.
	(88,000)	(479,000)	2. None.
Texas			
Aquilla Lake	743,000	589,000	
	(594,000)	(480,000)	1. Scope of work reduced due to higher priority facility security requirements at other projects.
	(149,000)	(109,000)	2. None.
Arkansas-Red River Basins Chloride Control (Area VIII)	1,373,000	1,262,000	
	(706,000)	(633,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(667,000)	(629,000)	2. None.
Bardwell Lake	1,574,000	1,598,000	
	(1,154,000)	(1,092,000)	1. None.
	(420,000)	(506,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Texas (Continued)			
Belton Lake	2,707,000	3,299,000	
	(2,127,000)	(2,019,000)	1. None.
	(580,000)	(1,280,000)	2. None.
Benbrook Lake	2,011,000	2,038,000	
	(1,525,000)	(1,317,000)	1. Budget amount decreased to more realistically reflect historical expenditures.
	(486,000)	(721,000)	2. None.
Buffalo Bayou and Tributaries	3,126,000	2,413,000	
	(2,729,000)	(2,010,000)	1. Risk analysis completed in FY 2003.
	(397,000)	(403,000)	2. None.
Canyon Lake	2,498,000	2,770,000	
	(1,764,000)	(1,991,000)	1. Increased costs to operate expanded recreational facilities.
	(734,000)	(779,000)	2. None.
Estelline Springs Experimental Project	5,000	3,000	
	(0)	(0)	1. None.
	(5,000)	(3,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Texas (Continued)			
Ferrell's Bridge Dam - Lake O' the Pines	2,682,000	2,660,000	
	(1,941,000)	(2,105,000)	1. None.
	(741,000)	(555,000)	2. None.
Granger Dam and Lake	1,612,000	1,568,000	
	(1,216,000)	(1,309,000)	1. None.
	(396,000)	(259,000)	2. None.
Grapevine Lake	2,602,000	2,596,000	
	(1,983,000)	(1,947,000)	1. None.
	(619,000)	(649,000)	2. None.
Hords Creek Lake	1,250,000	1,223,000	
	(835,000)	(883,000)	1. None.
	(415,000)	(340,000)	2. None.
Jim Chapman Lake	1,248,000	1,141,000	
	(663,000)	(981,000)	1. Budget amount increased to more realistically reflect historical expenditures.
	(585,000)	(160,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Texas (Continued)			
Joe Pool Lake	823,000	626,000	
	(702,000)	(516,000)	1. Scope of work reduced due to higher priority facility security requirements at other projects.
	(121,000)	(110,000)	2. None.
Lake Kemp	150,000	487,000	
	(144,000)	(131,000)	1. None.
	(6,000)	(356,000)	2. None.
Lavon Lake	2,609,000	3,312,000	
	(2,077,000)	(2,025,000)	1. None.
	(532,000)	(1,287,000)	2. None.
Lewisville Dam	3,134,000	3,124,000	
	(2,427,000)	(2,336,000)	1. None.
	(707,000)	(788,000)	2. None.
Navarro Mills Lake	1,676,000	1,597,000	
	(1,216,000)	(1,037,000)	1. Scope of work reduced due to higher priority facility security requirements at other projects.
	(460,000)	(560,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Texas (Continued)			
North San Gabriel Dam and Lake Georgetown	1,835,000	1,711,000	
	(1,310,000)	(1,560,000)	1. Budget amount increased to more realistically reflect historical expenditures.
	(525,000)	(151,000)	2. None.
O. C. Fisher Dam and Lake	872,000	1,419,000	
	(661,000)	(571,000)	1. Scope of work reduced due to higher priority facility security requirements at other projects.
	(211,000)	(848,000)	2. None.
Pat Mayse Lake	1,116,000	794,000	
	(748,000)	(623,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(368,000)	(171,000)	2. None.
Proctor Lake	1,623,000	1,683,000	
	(1,323,000)	(1,281,000)	1. None.
	(300,000)	(402,000)	2. None.
Ray Roberts Lake	862,000	689,000	
	(817,000)	(617,000)	1. Scope of work reduced due to higher priority facility security requirements at other projects.
	(45,000)	(72,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs (Continued).

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Texas (Continued)			
Somerville Lake	2,683,000	3,323,000	
	(1,932,000)	(2,122,000)	1. None.
	(751,000)	(1,201,000)	2. None.
Stillhouse Hollow Dam	1,805,000	2,487,000	
	(1,475,000)	(1,457,000)	1. None
	(330,000)	(1,030,000)	2. None.
Texas Water Allocation	300,000	100,000	
Allocation	(300,000)	(100,000)	1. Reduced continuing study requirement in FY 2004.
	(0)	(0)	2. None.
Waco Lake	2,270,000	2,316,000	
	(1,781,000)	(1,963,000)	1. Increased costs to operate expanded recreational facilities.
	(489,000)	(353,000)	2. None.
Wallisville Lake	999,000	958,000	
	(999,000)	(958,000)	1. None.
	(0)	(0)	2. None.
Wright Patman Dam and Lake	2,742,000	3,404,000	
	(2,132,000)	(2,089,000)	1. None.
	(610,000)	(1,315,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

a. Reservoirs.

Scheduling Reservoir Operations. The budget estimate of $706,000 provides for preparation, review and updating of water control manuals, real-time data collection to monitor hydrologic conditions at 93 Corps reservoirs, locks and dams and multiple purpose projects; and for the issuance of gate regulation instructions as necessary at 14 additional non-Corps dam and reservoir projects at which the Corps is responsible for flood control or navigation.

State Project Name	**ESTIMATED OBLIGATIONS ($)** FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Scheduling Reservoir Operations (All operations accounts)			
Kansas	(194,000)	(129,000)	
Oklahoma	(389,000)	(387,000)	
Texas	(255,000)	(190,000)	
Total Operations	(838,000)	(706,000)	1. Scope of work reduced in FY 2004.
Total Maintenance	(0)	(0)	2. None.
Total – Reservoirs	83,608,000	92,499,000	
	(60,506,000)	(59,342,000)	
	(23,102,000)	(33,157,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

b. Channel improvement, inspection, and miscellaneous maintenance.

Inspection of Completed Works. The budget estimate of $265,000 provides for inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, floodwalls, drainage structures and pumping plants.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Inspection of Completed Works (All Operations Accounts)			
Arkansas	(112,000)	(118,000)	
Kansas	(48,000)	(0)	
Missouri	(3,000)	(7,000)	
Oklahoma	(95,000)	(0)	
Texas	(383,000)	(140,000)	
Total Operations	(640,000)	(265,000)	1. Scope of work reduced due to higher priority facility security requirements at other projects.
Total Maintenance	(0)	(0)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

2. Flood Control (Continued)

b. Channel improvement, inspection, and miscellaneous maintenance.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Total Channel Improvements,Inspections, and Miscellaneous Maintenance	640,000 (640,000) (0)	265,000 (265,000) (0)	
TOTAL - FLOOD CONTROL	84,248,000 (61,146,000) (23,102,000)	93,470,000 (60,313,000) (33,157,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

3. Multiple Purpose Power Projects

The budget estimate of $90,019,000 provides for the operation and maintenance of 18 multiple purpose projects, including 4 navigation locks and dams, named in the list which follows. These projects have a current operational capacity of 1,726,200 kilowatts of hydroelectric power production. Annual requirements are for the operation and ordinary maintenance of project facilities, facility security, labor, supplies, materials, and parts required for the day-to-day functioning. The requested amount also includes application of Special Recreation Use Fees (SRUF) for recreation areas.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Arkansas			
Beaver Lake	5,064,000	4,297,000	
	(3,723,000)	(3,345,000)	1. Budget amount decreased to more realistically reflect historical expenditures.
	(1,341,000)	(952,000)	2. None.
Bull Shoals Lake	5,675,000	5,180,000	
	(4,241,000)	(3,746,000)	1. Budget amount decreased to more realistically reflect historical expenditures.
	(1,434,000)	(1,434,000)	2. None.
Dardanelle Lock and Dam	5,699,000	5,319,000	
	(3,781,000)	(3,668,000)	1. None.
	(1,918,000)	(1,651,000)	2. None.
Greers Ferry Lake	5,445,000	6,391,000	
	(4,573,000)	(4,202,000)	1. None.
	(872,000)	(2,189,000)	2. Construct facility security features.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Arkansas (Continued)			
Norfork Lake	4,368,000	3,471,000	
	(3,063,000)	(2,550,000)	1. Budget amount decreased to more realistically reflect historical expenditures.
	(1,305,000)	(921,000)	2. None.
Ozark-Jeta Taylor Lock and Dam	4,152,000	3,917,000	
	(2,859,000)	(2,748,000)	1. None.
	(1,293,000)	(1,169,000)	2. None.
Missouri			
Table Rock Lake	6,261,000	5,772,000	
	(5,168,000)	(5,023,000)	1. None.
	(1,093,000)	(749,000)	2. None.
Oklahoma			
Broken Bow Lake	1,627,000	1,684,000	
	(748,000)	(686,000)	1. None.
	(879,000)	(998,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Oklahoma (Continued)			
Eufaula Lake	5,546,000	5,889,000	
	(3,425,000)	(3,541,000)	1. None.
	(2,121,000)	(2,348,000)	2. None.
Fort Gibson Lake	4,352,000	6,463,000	
	(1,750,000)	(1,777,000)	1. None.
	(2,602,000)	(4,686,000)	2. Replace generator voltage regulators.
Keystone Lake	4,647,000	6,834,000	
	(2,732,000)	(2,733,000)	1. None.
	(1,915,000)	(4,101,000)	2. Construct facility security features.
Robert S. Kerr Lock and Dam and Reservoir	4,648,000	4,275,000	
	(3,136,000)	(2,682,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(1,512,000)	(1,593,000)	2. None.
Tenkiller Ferry Lake	3,690,000	3,217,000	
	(1,646,000)	(1,469,000)	1. Scope and costs of activities reduced due to operational efficiencies.
	(2,044,000)	(1,748,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Oklahoma (Continued)			
Webbers Falls Lock and Dam	4,178,000	6,551,000	
	(2,482,000)	(2,524,000)	1. None.
	(1,696,000)	(4,027,000)	2. Rehabilitate two bridge cranes and two gantry cranes.
Texas			
Denison Dam - Lake Texoma	6,132,000	8,500,000	
	(3,609,000)	(3,900,000)	1. None.
	(2,523,000)	(4,600,000)	2. Rewind Unit Number 1 generator.
Sam Rayburn Dam and Reservoir	4,559,000	5,618,000	
	(2,725,000)	(2,765,000)	1. None.
	(1,834,000)	(2,853,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Texas (Continued)			
Town Bluff Dam, B. A. Steinhagen Lake and Robert Douglas Willis Hydropower Project	2,135,000	1,946,000	
	(1,245,000)	(1,335,000)	1. None.
	(890,000)	(611,000)	2. None.
Whitney Lake	5,205,000	4,695,000	
	(3,033,000)	(3,022,000)	1. None.
	(2,172,000)	(1,673,000)	2. None.
TOTAL - MULTIPLE PURPOSE POWER PROJECTS	83,383,000	90,019,000	
	(53,939,000)	(51,716,000)	
	(29,444,000)	(38,303,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 2004

4. Protection of Navigation

Project Condition Surveys. The budget estimate of $50,000 provides for hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the budget request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that users can be advised of channel conditions and future maintenance can be scheduled.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 2003 Total (Operations) (Maintenance)	 FY 2004 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY03 to FY04(10%+/-) 2. Major Maintenance Items Budgeted in FY04(Threshold $1,000,000)
Project Condition Surveys			
Texas	50,000 (50,000) (0)	50,000 (50,000) (0)	1. None. 2. None.
TOTAL - PROTECTION OF NAVIGATION	50,000 (50,000) (0)	50,000 (50,000) (0)	
GRAND TOTAL - SOUTHWESTERN DIVISION	266,942,000 (134,529,000) (132,413,000)	277,924,000 (131,889,000) (146,035,000)	